

**INFLUENCE OF ELECTRONIC GADGETS EXCESSIVE
USE ON ACADEMIC PERFORMANCE AND FAMILY
INTERACTION AMONG ADOLOSCENTS**



**A DISSERTATION SUBMITTED TO THE TAMILNADU
DR.M.G.R MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING**

APRIL 2012

CERTIFICATE

This is the bonafide work of **Mrs.S.Esther Jennifer** M.Sc., Nursing II year student from Sacred Heart Nursing College, Ultra Trust, Madurai, submitted in partial fulfillment of the Degree of Master of Science in Nursing under The Tamil Nadu Dr.M.G.R. Medical University, Chennai.

Dr.Nalini Jeyavanth Santha M.Sc., (N), Ph.D.,
Principal,
Sacred Heart Nursing College
Ultra Trust
Madurai – 625 020.

Place:

Date:

**INFLUENCE OF ELECTRONIC GADGETS EXCESSIVE USE ON
ACADEMIC PERFORMANCE AND FAMILY INTERACTION
AMONG ADOLESCENTS**

APPROVED BY THE DISSERTATION COMMITTEE ON: _____

**PROFESSOR IN NURSING
RESEARCH**

: _____

**Dr.(Mrs). Nalini Jeyavanth Santha, M.Sc.,(N) Ph.D.,
Principal.
Sacred Heart Nursing, College
Madurai**

**CLINICAL SPECIALITY
EXPERT**

: _____

**Mrs. Jesinda, M.Sc.,(N)
Associate Professor,
Department of Mental Health Nursing
Sacred Heart Nursing, College
Madurai**

MEDICAL EXPERT

: _____

**Dr. M.Karthikeyan, M.D (Psychiatry)
Asst. Professor, Department of Psychiatry,
Government Rajaji Hospital, Madurai.**

**A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R
MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING**

APRIL 2012

ACKNOWLEDGEMENT

*“I will magnify the Lord my God, I will give thanks with my whole heart,
will tell all your wonderful deeds now and for ever”.*

- Bible

Lord you have helped me to find green pastures amidst the unsure paths of have tord. Thank you so much for your leading presence, marvelous guidance and renewing strength towards the processing of this entire dissertation.

I would like to express my sincere thanks to **Prof. K.R.Arumugam, M.Pharm.,** Correspondent, Sacred Heart Nursing College, Ultra Trust, Madurai for his support and providing the required facilities for the successful completion of this study.

I express my heart felt and sincere thanks to **Dr. Mrs. Nalini Jeyavanth Shantha, M.Sc(N)., Ph.D.,** Principal, Sacred Heart Nursing College, Madurai for her interest cheerful approach, patience, an never ending willingness and guidance in shaping this protect into the present form.

I extend my heart felt and sincere thanks to my research guide **Mrs. Jesinda Sam, M.Sc(N).,** Associate Professor, for valuable support, immense patience, infinite encouragement, constrictive corrections, time she spared in providing the interest. my heart brims with gratitude and words infact there are no words to express my heart felt thanks to her.

Register my sincere thanks to **Dr.Karthikeyan, M.D(Psy)., DPM.,** Asst Professor and Head of psychiatric department, Government Rajaji Hospital, whose support, suggestion and meticulous in making this study a success.

Its my privilege to thank **Prof. Mrs. Chandrakala, M.Sc(N)., Ph.D.**, Vice Principal, Sacred Heart Nursing College, Madurai for all the support rendered during the endeavor during the endeavor.

I extend my thanks to **Prof. Mrs. Manjula, M.Sc(N)., Ph.D.**, my class coordinator and **Prof. Mrs. Juliet Sylvia, M.Sc(N)., Ph.D.**, my 1st year class coordinator for their encouragement & suggestions through out the study.

I record my sincere thanks to **Mrs. Induja, M.Sc(N).**, Asst. Professor for her suggestions and support given to me throughout the study.

I record my sincere thanks to **Mr. Velusamy Mani, M.Sc., M.Phil.**, for excellent touch in the statistical analysis of this study.

I thank **Mr. Thirunavukarasu, M.Sc.**, Librarian and **Mrs. Jotheeswari**, Sacred Heart Nursing College, Madurai for their extending support through out the study.

I am thankful to **Mr. P. V. Prakash, B.Sc.**, Nilaa Net Café for formatting the content.

I remember my beloved **Dad, Mum** and my beloved Sister **Mrs. Deena Suresh, B.Sc(N).**, and my brother **Mr. Sam Jonathan, B.P.T.**, for their love, motivation, blessings and prayers for keeping me in high spirit in pursuing this study.

It is my pleasure and privilege to express my fervent gratitude and sincere thanks to my father in law **Mr. John Cross** and my sister in law **Mrs. Jeba Salma** for their support and prayers.

My heart full thanks to my husband **Mr. J. Livingston** and my beloved Son. **L. Calvin Bennet** for their support and encouragement which come along across the miles.

I am very much thankful to all my friends for their immense help and moral support throughout the project.

I thank all the participants in this study.

I am at loss, if would miss out any one to whom should express my gratitude for their direct and indirect help during the path of this study.

TABLE O F CONTENTS

Chapter No	Title	Page No
I	INTRODUCTION	1-14
	Background of the study	1
	Significance and need for the study	5
	Statement of the problem	9
	Objectives	9
	Hypotheses	10
	Operational Definitions	10
	Assumptions	11
	Delimitations	11
	Projected outcomes	12
	Conceptual Framework	12
II	REVIEW OF LITERATURE	15-28
	Overview of adolescents	15
	Studies related to electronic gadget excessive use And academic performance	20
	Studies related to electronic gadget excessive use And family interaction	27
III	METHODOLOGY	29-35
	Research Approach	29
	Research Design	29
	Setting of the study	29
	Sample	30
	Sampling technique	30

	Criteria for sample selection	30
	Research tool and technique	31
	Testing of tools	32
	Pilot study	33
	Data collection procedure	33
	Data Analysis	34
	Ethical Consideration	35
IV	ANALYSIS AND INTERPRETATION OF DATA	36-66
V	DISCUSSION	67-72
VI	SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS	73-79
	Summary	73
	Major Findings of the study	74
	Conclusion	76
	Implications	76
	Limitations	78
	Recommendations	79
	REFERENCES	80-83
	APPENDICES	i-xxviii

LIST OF TABLES

Table No	Title	Page No
1.	Frequency & percentage distribution of demographic Variables of adolescents	38
2.	Distribution of adolescents according to the level of Electronic gadget use	47
3.	Distribution of adolescents according to the level of Academic performance	48
4.	Distribution of adolescents according to the level of Family interaction	49
5.	Correlation between electronic gadget excessive use and family interaction	50
6.	Correlation between electronic gadget excessive use and academic performance	51
7a	Association between electronic gadget on cell phone and Demographic variables of adolescents	52
7b	Association between electronic gadget on television and Demographic variables of adolescents	55
7c	Association between electronic gadget on video games and Demographic variables of adolescents	59
7d	Association between electronic gadget on internet and Demographic variables of adolescents	63

LIST OF FIGURES

Figure No	Title	Pages
1.	Conceptual framework based on Rosenstocks Health Belief Model	14
2.	Distribution of adolescent according to their standard	43
3.	Distribution of adolescents according to their type of family	44
4.	Distribution of adolescents according to their sex	45
5.	Distribution of adolescents according to their order of birth	46

LIST OF APPENDICES

Appendix No	Title	Page No
I	Letter seeking permission to conduct the study	i
II	Letter requesting opinion and Suggestion of Experts for establishing Content validity of	ii iii
III	List of experts Consulted for the Content Validity Of research tools	iv
IV	Tool validity certificate	v
V	Demographic Data	
VI	Tool - English	vii
VII	Module	xiii
VIII	Pamphlet	

ABSTRACT

Electronic gadgets like video games, internet, cellphone and television has become widely and unrestrictedly used tools. These gadgets have become a central force that fuels the rhythm of daily life. But for a growing number of adolescents its on out of control habit instead of a necessary part of life which affects their academic performance and family interaction. This study was conducted to assess the influence of electronic gadgets excessive use among adolescents on academic performance and family interaction in selected schools at Madurai district. A descriptive correlational research design was used. The instrument used for data collection was a rating scale. Descriptive and inferential statistics were used to analyze the data. The study findings revealed 48% of the samples were using electronic gadget excessively, 31% of the samples were using moderately and only 21% of the samples were using averagely. The study findings shown that 57% of the samples had average academic performance, 33% of the samples had good academic performance and only 10% of the samples had poor academic performance. The study findings elicited that 98% of the samples had poor family interaction and only 2% of the samples had moderately adequate family interaction. There is a negative relationship between electronic gadget excessive use, family interaction and academic performance. There was a significant association between television and demographic variables like age, standard, place of residence and hobbies. For video games variables such as age, standard, education of mother and outdoor activities had significant association. For internet variables such as age, standard, place of residence and hobbies had a significant association. There is no association between cell phone and demographic variables.

Based on the study findings the investigator prepared a module and pamphlet with the motive of creating awareness to the adolescents and their parents regarding effects of electronic gadgets excessive use and how to overcome it.

CHAPTER – I

INRODUCTION

BACKGROUND OF THE STUDY

“Too much of anything is good for nothing”

With the introduction of new technologies to our daily lives the electronic gadgets like cell phone, television, internet, play station / computer games have become widely and unrestrictedly used tools and one of the major phenomena, in the last decade. However their healthy adoptive use progressively gave place to their excessive use and lack of control. Over use have severe impact on the daily life of millions of children and adolescents and their academic performance and also affects the parent child relationship.

Electronic gadgets have become entrenched features of our daily lives. Computer use has reached beyond work and is now a major source of fun and entertainment for many children. For most of the children computer use and videogames play is integrated into their lives in a balanced healthy manner. For others time spent on computer, videogames, mobile and television is out of balance and even family.

In today's world an exponential advancement has taken place in the electronic media. Television is one of the important media for any age group, especially children and adolescents are easily attracted towards this media. Technologically, as a combination of sound and pictures it provides for the most effective temporal and spatial transmission of reality to its viewers. Due to its wide spread net work, it has become a major source of information and entertainment for a large number of our children.

Watching television has become a more solitary activity and less shared time where the parents are not able to monitor their children which lead to various kinds of negative impact on children and adolescents.

In the new study, Jeffrey Johnson found that at age 14, most of the children watched between one and three hours of television each day, while 13 percent watched more than four hours, and 10 percent watched less than one hour.

Johnson's team found that 30% of students who watch more than 3 hours of television at age 14. Nearly one third of those who watched many hours of television fell behind or failed to graduate by age 22.

You forget to eat and sleep; you even forget family and friends. Yes, video games addiction is real and a growing problem (Geetha Padmanabhan).

There is enough evidence that children have been attracted to videogames. Video games have become part and parcel of many children's day to day lives and it is the fastest growing entertainment industry. Youth world wide play violent video games for many hours per week.

The latest research shows the percentage of homes with children that have video game systems has risen to 83%. The percentage of homes with at least three video games now stands at 31% over all 92% of 2 to 17 year old play video games.

There is broad agreement that some children and adults play video games for excessive period of time. In Minnesota (2010) student survey data showed about one in 10 boys playing more than 2 hours of video games per day.

(Science daily) noted that the young people whose behavior rose to the level of videogame addiction were more likely than were non-pathological players to report the following:

- ❖ Having game systems in their bed rooms
- ❖ Having poor grades in school
- ❖ Feeling “Addicted” to game systems
- ❖ Experiencing a higher than normal number of health problems
- ❖ Stealing to support their video game habit.

Internet has been hailed as perhaps the most important invention of the 20th century. The internet is an integral part of modern life and for the vast majority of internet users it benefits far outweigh the adverse consequences secondary to “excessive use”.

In (2005,) more than 21 million adolescents between the ages of 12 and 17 had access to and routinely used internet. Instant messaging, chat rooms, and emails have given adolescents new ways to talk with their friends or make new friends.

According to a recent survey of young people’s use of the internet, teens routinely communicate in chat rooms and instant messaging and more than 85% state they use one or both on a daily basis. Females, more than males, typically engage more heavily in chat rooms and other communication environment.

In stand ford study, the researchers found 68.9% were regular internet users, 13.7% found hard to stay away from the internet 12.4% stayed online longer than intended very often, 8.7% attempted to conceal non essential internet use from family, 8.2% used the internet as away to escape problems, 5.9% felt their relationships suffered as a result of excessive internet use.

A recent survey by the Indian institute for youth development estimates 93% Indian adolescents use the internet.

China, which has more than 140 million internet users in cracking down on abuse with new rules that restrict the opening of new cybercafés and limit young people less than 18 years of age to three hours of gaming at a stretch.

Things have changed dramatically since the stone age of cell phones. i.e. the early 2000's we merely made or answered calls after hearing a simple "tring-tr(ing)". Now it is merely playing from the hip pocket. The cell phones began to shimmer and shine. Since 1990's cell phone use among young people has been on the increase. In addition, of the young cell phone users, teenage girls tended to use text messaging much more than their counterpart.

(Rosen,) 2003 in his research study found that approximately 80% of the teens have cell phone of the 33% of teens who reported that they routinely sent text messages.

China network information center as of June 30 (2008) showed that 123 million people had gone online, of which 14.9% were teenagers below 18 year old. The China communist youth league claimed in 2009 those over 17% of Chinese citizens between 13 and 17 are addicted to the internet.

Sharp et.al., (2007), studied the way teens use mobile phones. First 75% of all teenagers and 58% of 12 years olds now have a mobile phone. Almost 90% of phone owing teens send & receive texts, most of them daily. 80% of phone owing teens use them to take pictures 60% listen to music, 46% play games, 32% swap videos and 23% access social networking sites the mobile phone in short is now the favored communication hub for the majority of teens.

Since the late 1990s, cell phone use among young people has been on the increase. Student found, text messaging some one during class time. The students may not be paying attention as carefully in class as they could. This too may be an additional distraction that influences grades.

When time spent on these computers, videogames, television & mobile or cruising the internet, reaches a point that it harms a adult family & social relationships and disrupts school life that person may be caught in a cycle of addiction.

The major consequences are spends less time interacting with family members, parents may find difficult to address the problem. Children will develop poor sleep and dietary habits, experience depressed mood, anxiety, frustration and anger.

The increase in time spent by children using electronic gadgets for recreating has been shown to be a significant factor in decreased time spent on homework and school assignments. Most of the children fall asleep in school, not keeping up with assignment, worsening grades, dropping out from schools, obsessing and preoccupied not only does electronic gadget take time away from home work, it takes away from learning. It sets children up for a sedentary.

SIGNIFICANCE AND NEED FOR THE STUDY:

We may be growing old in a world, where a technological solution is born. Technology has developed so much that it is almost crucial to have electronic devices particularly, television, mobile, internet, video games etc. Teenagers have gotten so used to have technology around them. However, while having these electronic gadgets that make life easier, comfortable, and handy at most of the times, it could also have negative effects on their lives particularly in their studies and family relationship when used too much.

Ray et.al.,(2005) from India reported that children having exposure to violence through media, had poorer school performance and its impact on their psychosocial adjustments was detrimental.

Peele (1985), reported that the major motives for addictive behavior are reduction of pain, and awareness (i.e. escape) enhanced sense of control, power and self esteem (i.e. compensation) and the simplification, predictability and immediacy of experience (i.e. ritual).

Hopf et.al., (2004) showed that more frequently they play violent electronic games at beginning of adolescence, the higher will these students violence and delinquency be at the age of 14.

The research conducted by Dr. Douglas Gentile, Asst. Professor in psychology at the Iowa State University found that 10% of Americans teens are videogames addicts according to his survey.

Sharif and Surgent (2006) found that adolescents who spent time watching television, playing video games, operating mobile phones and hooked on internet after school, instead of doing their home work more likely to have lower grades

Television has become one of the most significant agents in the lives of young children watching T.V has become a routine and inevitable part of student's life today. TV exposes children to a wide variety of topics and events that they encounter in day today life. To a great extent, they (it) rob student's study time and this may result in a decline in their academic achievements.

Children consider television as one of the family members in their lives. Watching television has become a more solitary activity and less shared time where the parents are not able to monitor their children which lead to various kinds of negative impact on children.

Hunston et.al., (1988), states by the time a child is eighteen years old, he or she will witness 2,00,000 acts of violent including 40,000 murders on television.

Winn states that, TV over develops the right hemisphere and retards the development of verbal and logical left hemisphere.

In US, the house holds posses at least one television is 99% and number of TV sets the average US household posses is 2.24% & number of hours/day that TV is an average home is 6 hrs 47mts & number of hours of TV watched annually is 250 billion & approximately 4000 studies have examined the TV effects on children

Internet Usage by Age:

Age in Years	Percentage
13 – 29	93
30 – 49	81
50 – 64	70
65 & older	38

Stanford- (2000) conducted a nationwide house hold survey and interviewed 2,513 adults. The researcher found that 68.9% were regular internet users, which is consistent with previous studies, and that

- ❖ 13.7% (more than one out of eight respondents) found it hard to stay away from the internet for several days at a time.
- ❖ 12.4% stayed online longer than intended very often or often.
- ❖ 12.3% had seen a need to cut back on internet use at some point.
- ❖ 8.7% attempted to conceal non-essential internet use from family, friends and employers.
- ❖ 8.2% used to internet as a way to escape problems or relieve negative mood.
- ❖ 5.9% felt their relationship suffered as a result of excessive internet use.

In South Korea, where some of the most interesting research on internet addiction has been published, there said to have approximately of 10,000 children aged 6-19 who were afflicted by this addiction and were requiring treatment of these children psychotropic the rest required hospitalization.

Countries with the highest number of internet uses:

Country	No. of Population	Percentage
Japan	95,979,000	75.5%
US	227,719,000	75%
China	360,000,000	26.9%
India	81,000,000	70%

New internet & American life project survey (2003) reported that more than half (53%) of adults play video games and about one in 5 adults (21%) play every day. Another area of cell phone use that has been studied, reported that two third of all the Indian children have cell phones.

As per the study findings of Merry Madden (2001) 53% most often communicate with friends via written messages. According to a report by new internet & American life project (2005) 61% of the time they are chatting via instant messaging.

In (2004) according to Nokia's bill Plummer last year, it was 22% of North American cell phone subscribers were active testers, In 2003 it was 36%. In 2005 more than 500 billion text messages were sent and received world wide as reported by Verizon wireless. By 2010 it is projected to be more than 2.3 trillion.

In Japan 80% of high school students and 25% of Junior high school kids carrying these devices. In great Britain 36% of all college students admitted that they could not live without these devices.

Nowadays, the electronic gadgets are widely & unrestrictedly used by adolescents. The researcher analyzed the impact of electronic gadgets excessive use which motivated the researcher to undertake the current study.

STATEMENT OF THE PROBLEM:

A study to assess the influence of electronic gadget excessive use on academic performance and family interaction among adolescents in selected schools at Madurai.

OBJECTIVES:

1. To find out the level of electronic gadget excessive use among adolescents.
2. To find out the level of academic performance among adolescents excessively using electronic gadget.
3. To find out the level of family interaction among adolescents excessively using electronic gadget.

4. To find out the relationship between electronic gadget excessive use and academic performance among adolescents excessively using electronic gadget.
5. To find out the relationship between electronic gadget excessive use and family interaction among adolescents excessively using electronic gadget.
6. To associate the electronic gadget excessive use with their socio demographic variables such as age, sex, standard, education of parents, occupation of parents, income of parents, number of children, order of birth, religion, place of residence, type of family, availability of devices, hobbies, outdoor activities and social gathering.

HYPOTHESIS:

All hypothesis will be tested at 0.05 level of significance.

1. There will be a significant negative relationship between electronic gadget excessive use and academic performance.
2. There will be a significant negative relationship between electronic gadget excessive use and family interaction.
3. There will be a significant association between electronic gadget excessive use and socio demographic variables. such as age, sex, standard, education of parents, occupation of parents, income of parents, number of children, order of birth, religion, place of residence, type of family, availability of devices, hobbies, outdoor activities and social gathering.

OPERATIONAL DEFINITIONS:

Electronic gadget:

The term electronic gadget refers to latest scientific interventions such as television, computer / internet, mobile phone and play station / videogames.

Excessive use:

It refers to any adolescents using the electronic gadget very frequently as measured by electronic gadget excessive use screening tool with the score of 75 – 100.

Adolescents:

Young person who has undergone puberty but who has not reached full maturity, who is studying in IX, X, XI, XII standard, and between the age group of 13-19 years.

Academic Performance:

This denotes the mean average score obtained by IX, X, XI, XII standard students in the past three terminal examination (quarterly, half yearly & annual) conducted by their respective schools.

Family Interaction:

Family interaction is an opportunity to maintain, establish and promote parent child relationship as measured by family interaction assessment tool.

ASSUMPTION:

1. Adolescents are more attracted by the electronic gadgets.
2. Use of electronic gadget is progressively increased among adolescents.

DELIMITATIONS:

1. This study is delimited to selected private English Medium School
2. Data collection period is delimited to 5 weeks.

PROJECTED OUTCOMES:

The findings of the study will help a nurse to plan for interventional educational programme such as counseling on ill effects of excessive electronic gadgets use, and it will help to create awareness to the parents and children about the influence of electronic gadgets excessive use on academic performance and family interaction.

CONCEPTUAL FRAMEWORK

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services.

This study is based on Rosenstock's Health belief model. This model focuses on 3 concepts is individual's perception modifying factors & likelihood of action.

Health belief model helps the health care provider in recognizing negative consequences of excessive electronic gadget and use addresses the relationship between person's belief and behaviour, and also it helps in motivating the adolescents to promote health through counseling and distribution of pamphlets.

Perceived Susceptibility:

In this study, it refers to the state of being very likely to be influenced, harmed or affected by electronic Gadget excessive use.

Perceived Seriousness:

It refers to the adolescents perception regarding the consequences of electronic gadget excessive use.

Perceived Benefits:

It denotes the benefits of appropriate use of electronic Gadgets such as acquisition of knowledge, scoring good marks and good parent-child relationship.

Perceived Barriers:

It represents the factors which influence the adolescents to use electronic gadget excessively. It includes peer group family, modernization, parenting style, lack of community between parent & child, lack of parental love and affection, parents who are employed.

Cues to Action:

Refers to the motivation and counseling of the adolescents to reduce the hours spend on electronic gadget through reports of magazines news papers, preparing pamphlets one effects arranging awareness programme.

Likelihood of Taking Action:

This shows the behaviour of adolescents in taking & adhering to the appropriate use of electronic gadget.

```
graph TD
    subgraph Individual_Perception [INDIVIDUAL PERCEPTION]
        A[Perceived seriousness of Electronic gadget excessive use & Perceived susceptible to poor academic performance & Poor family interaction]
    end
    subgraph Modifying_Factors [MODIFYING FACTORS]
        B[Demographic Variables: Age, sex, standard, education of parents, occupation of parents, income of parents, no. of children, order of birth, device capability, religion, place of residence, type of family, hobbies, outdoor activities, social gathering.]
        C[Perceived Threat: Electronic gadget uses and its consequences on Academic & family interaction]
        D[Cues to Action: Preparing pamphlets on effects of excessive electronic gadget use, Arranging awareness programme, Counselling, News paper, magazines]
    end
    subgraph Likelihood_of_Action [LIKELIHOOD OF ACTION]
        E[Perceived Benefits: Appropriate use of electronic gadgets. Good academic achievement, good parent-child relationship.]
        F[Perceived Barriers: Peer group, family, modernization, parenting style, lack of communication between the parent & child, lack of love and affection.]
    end
    A --> C
    B --> C
    D --> C
    C --> G[Likelihood of taking action: Behaviour of adolescence in taking & adhering to the appropriate use of electronic use.]
    E --> C
    F --> C
```

INDIVIDUAL PERCEPTION

Perceived seriousness of Electronic gadget excessive use & Perceived susceptible to poor academic performance & Poor family interaction

MODIFYING FACTORS

Demographic Variables:

Age, sex, standard, education of parents, occupation of parents, income of parents, no. of children, order of birth, device capability, religion, place of residence, type of family, hobbies, outdoor activities, social gathering.

Perceived Threat:

Electronic gadget uses and its consequences on Academic & family interaction

Cues to Action:

- Preparing pamphlets on effects of excessive electronic gadget use
- Arranging awareness programme
- Counselling
- News paper, magazines

LIKELIHOOD OF ACTION

Perceived Benefits:

Appropriate use of electronic gadgets. Good academic achievement, good parent-child relationship.

Perceived Barriers:

Peer group, family, modernization, parenting style, lack of communication between the parent & child, lack of love and affection.

Likelihood of taking action:

Behaviour of adolescence in taking & adhering to the appropriate use of electronic use.

CHAPTER - II

REVIEW OF LITERATURE

“Literature is a kind of intellectual light which like the light of the sun may sometimes enable US to see what we do not like” (Samuel Johnson).

According to Polit and Hungler (1995) researcher almost never conduct a study in an intellectual vacuum; their studies are usually undertaken within the context of an existing base of knowledge. Researcher often undertakes a literature review to familiarize themselves with that knowledge base.

For the present study research and non research literature were reviewed and organized under following headings.

1. Overview of adolescents and electronic gadgets
 - a. Definition of adolescents
 - b. Phases of adolescent period
 - c. Theoretical views of adolescence.
2. Studies related to electronic gadget excessive use and academic performance.
3. Studies related to family interaction and electronic gadget excessive use.

OVERVIEW OF ADLOSCENCE:

The largest generation of adolescents in history, 1.2 million is preparing to enter adulthood in this rapidly changing world. Their educational and health status, their readiness to take on adult roles and responsibilities and the support they receive from their families communities and government will determine their own future and the future of their countries as Cited by Ghai (2004).

Nearly half of all people are under the age of 25, the largest youth generation in history. The state of world population 2003 report examines the challenges and risks faced by this generation that has an impact directly on their physical, emotional and mental well being.

India is the second most populous country with the population of Billion and 300 million young people aged between 10-24 years. Adolescents of age 10-19 years represent over one-fifth of the population. Adolescents constituted 22.8% of population in India as on March, 2001 (Planning Commission, 2001).

The transition from childhood to adulthood is never so easy. This group is a vulnerable group to both physical and emotional problems. Growing up in today's world is not easy either for an adolescent or for any adult, as life brings many crises and disappointment.

Definition of adolescents :

It is defined as the transition from childhood into adulthood.

(Marry C. Townsend)

Phases of Adolescent Period:

Early adolescence (13-15 years)

Middle adolescence (15-17 years)

Late adolescence (17-19 years)

Developmental Stage:

Adolescent is a unique stage of development that occurs between age 11 and 20 years, when a shift in growth and learning occurs. The developmental tasks that emerge during adolescence threaten the person's defenses. They can either stimulate new adaptive ways of coping or lead to regression and maladaptive coping responses.

Old problems may interfere with the adolescents coping abilities, and environmental factors may help or hinder the adolescent's attempts to deal with these issues. (Beard, 2005).

During adolescence major events occur, and attempts are made to deal with them. This results in behavior uniquely "Adolescent". Tasks that should be accomplished during adolescence are as follows (Havighurst, 1972).

- ❖ Achieving new and mature relations with age mates of both sexes.
- ❖ Achieving masculine or feminine social roles
- ❖ Accepting physical build and using the body effectively.
- ❖ Achieving emotional independence from parents and other adults.
- ❖ Preparing for a career
- ❖ Preparing for marriage & family life.
- ❖ Acquiring a set of values and an ethical system as a guide to behavior and developing ideology.

THEORETICAL VIEWS OF ADOLESCENCE:

Biological Theory:

Emphasis is on physical growth behavior and the environment, which influence feelings, thoughts and actions.

Psychoanalytical Theory:

According to Sigmund Freud, puberty is called the genital stage in which sexual interest is awakened. Biological changes upset the balance between the ego and id, and new solutions must be negotiated.

Psychosocial Theory:

According to Erick & Erickson, adolescents attempt to establish an identity within the social environment. They seek to coordinate self security, intimacy and sexual satisfaction in their relationships.

Attachment Theory:

According to Rosenstein & Horowitz adolescents focus on the quality of attachments of defining one's vulnerability to developmental changes and sees in secure attachments as a risk factor that can result in maladaptive responses to loss or trauma.

Cultural Theory:

Anthropologist's views adolescence as a time when a person believes that adult privileges are deserved but he held. This stage ends when society gives full power and status of an adult.

Multidimensional Theory:

According to Meeks (1990), adolescence is seen as adaptation on a continuum of development. There is less emphasis on the age and more on the developmental level and timing of biological, psychological and environmental influences.

Issues in Adolescents Development:

These issues of independence, body image, identity, social role and sexual behavior can produce adaptive or maladaptive response as the adolescents attempt to cope with the developmental tasks. In process of this, many adolescents develop addiction to many things.

Adolescence is the period when the individual can be shaped and Molded into great assets. But lack of direction and appropriate guidance can lead to a great deal of frustration.

OVER VIEW OF ELECTRONIC GADGETS:

Teens now live in a world in which the internet, cell phone, text messaging and video games and other technology dominate their communication and are an integral part of life as they understand.(Hindu,2012).

Technology is so integrated into teen's lives that it's difficult to measure where their offline begins and their online life ends. Adult culture after all, is certainly very worried about how teenagers are dealing with constant rush of technology in their lives.

However, the pace of this social change is profound and as with any quick change, it's difficult to know what the consequences may be down the line. What is important about all this is not just the effect of technology of teens themselves, but how their use of technology is changing family dynamics, education, interpersonal relationships, crime health. (Peele,1985).

Video games have become part and parcel of many children's day today likes and it is the fastest growing entertainment industry. Playing elevates dopamine". A person playing video games feels an emotional high, commonly known as an adrenaline rush, as a result of his gaming tactics. He then plays the game more and pushes his physical and psychological limits in order to experience the emotional high. Eventually he will again reach a level that stimulates the production of adrenaline. The cycle may continue until it leads to an unhealthy level of interaction with videogames.(Walker,1979).

Singer, said that addiction to television is an extreme position, and speculated that television's magnetism can be explained by a human "orienting reflex". "That is, we are programmed to respond to new or unexpected stimuli and because novel and sudden images are key features of television's magnetism it draws our attention.

When comparing the different modes of communication, youth feel they would be most likely to miss out on the activities with friends if they didn't? Have a cell phone. If teens went to feel more out going and have more time to think about what they have to say, they are more likely to use instant messaging to communicate over cell phones, text messaging or social networking websites.(Davis 1989).

Internet addiction an online related compulsive behavior that interferes with normal living and causes severe stress on family, friends, loved ones and work is a psychological and behavioral problem that is spreading around the world, expert say.

Studies related to electronic gadget excessive use and academic performance:

Robert S, Wesskrich,(2009) professor of literal studies at California state university conducted a survey of 196 pairs of parents and their sons/daughter found that the use of cell phones did not allow for quality communications between parents and children in place for face to face conversation adolescents who don't called their parents to seek support generally reported they did not had better relationships.

Teena & Erick W. Dolan,(2008) investigated the use of the internet and computer games . They administered two questionnaires to 1,591 students from eight different schools districts in Ontario, Canada. The students received the first questionnaire in the 9th & 10th grade and received the second questionnaire in the 11th

& 12th grade. They found that “Most adolescents” (93.9% of boys, 94.7% of girls) reported using the internet in both early high school and late high school”. In contrast only 80.3% of boys and 28.8% of girls reported playing computer games”. The use of computer games was associated with a decrease in academic performance.

Johnson G et, al (2007) have concluded that uncontrolled television viewing can have harmful effects on children. Increased verbal and physical aggressiveness, elevated risk of subsequent attention and learning difficulties, poor home work completion, negative attitude towards school, poor grades and long term academic failure reduced persistence at problem solving and reduced creativity have been reported respectively.

Robert Weis, (2007) indicates that young children who have a video game system are not doing so well academically as their peers who do not play. The studies involved 64 children between six and nine years old who families have not had a video game system but were planning to buy one. All children were tested in reading, writing & mathematics and then received a video games system games plus three or four months immediately after it was completed to the study. The study found that children who received and began using video games immediately spent less time doing home work and other academic activities after school than children who did not have video game system.

Michigan state university (2006) says that “internet dependent” students spent an average of almost 4 hours per day on line and reported spending at least three consecutive hours online per week. They frequently got “less grades” and less than 4 hours of sleep because of internet activity, looked for ways to go online while at school and used their online activities as a way to counter stress and improve their mood.

Connor,(2006) Randomly selected four hour blocks of children's television from 3 different stations. PBS, Disney and Nickelodeon. She looked at all of the content aired between the programs. According to Connor the programming content mattered too. She added that children shouldn't watch more than two hrs of TV daily, and its even better if too can keep it under one hour, because that's where she said the real differences in school work started to show up.

Dr. Iman Sharif (2006) conducted a survey of 4,500 middle school children. Dr. Sharif indicates that the frequency and times children play video games determine any negative effects when compared with their academic progress. He concluded that, video game play during the week was harmful to a child's academic progress, but playing during the weekend did not adversely affect a student's performance.

Dr. Shock (2006) conducted an explorative study & examined whether differences exists in the academic performance of college student face book users and non users. Data were collected from 102 undergraduate and 117 graduate students from a Midwestern university in the United States. The majority were female students (60.3% and 39.7% male participants). The survey consisted of open and closed response in five sections. Face book users scored lower grade than the non users. The total hours face book users spent on studying was (1-5 hours per week) where as the non users spent 11.15hours a week.

ReyJuneo, (2005) conducted a study on "Too much face book and not enough books" data was collected from 1,839 undergraduates who had face book access. Data regarding the student grades were collected from the university registrar.

The study findings were concluded that face book use in and of itself is not detrimental to academic outcomes it depends on how it is used. Face book use may be causing lower grades, it is equally likely that students who have lower grades happen to use face book more.

Hitlin (2005) conducted a study on grade fluctuation & cell phone he found that there is a difference in grade fluctuation among those who put off doing their home work to spend time in cell phone or text messaging.

Arnetz BB, et.al., (2005) conducted an experimental study “On teenagers cell phone use on academic performance”. It reveals that teenagers who use their phones late at night are risking lack of proper deep rem sleep which has the potential to alter their moods and lead to personality changes. Lack of concentration and poor academic performance.

Anna Gusline, (2005) conducted a study on “Watching TV harms kids academic success” Her study findings were too much time in front of the TV reduces children’s learning abilities, academic achievement and even the likelihood of their graduating from university. But it may be the quality, not quantity of the programmes that really matters.

Frederick Zimmerman et.al., (2004) at the University of Washington in Seattle, found that kids who watched the most TV before the age of 3 performed poorest on reading and mathematics tests at ages 6 and 7 even of whom was with one percent at a university child study center. Half of the one hour session, parents and children were in a play room without TV in the other half hour parents chose an adult directed program to watch. The researchers observed how often parents and children talked with each other, how actively involved the parents were in their children’s play

and whether parents and children responded to each other's questions and suggestions.

When the TV was on the researchers found, both the quantity and quality of interactions between parents and children dropped. Specifically parents spent about 20% less time talking to their children and the quality of the interactions declined, with parents less achieve, attentive and responsive to their youngsters.

David Walsh Ph.D., (2004) says TV in the bed room "A recipe for poor academic performance" 53% of kids in general and 65% American teens have TVs, in their bedrooms. Only 35% of American teens have their own stereo equipment and fewer teens have CD players and / or cassette players (57%) than have TV in their bed rooms. The findings of the study revealed that the children who have TVs in their bed rooms watch five and a half hrs more TV each week than children who don't have them in their bed rooms.

Jeffrey Johnson et. al., (2003) of psychiatric institute, in US studied the TV habits of 14 years olds from 678 families. The researcher inter viewed and found that at age 14 most of the children watched between one & three hours of TV each day, while 13% watched more than 4 hrs, 10% watched less than one hour. Nearly one third of those who watched many hours of television "fall behind in the grades".

Karpinski, (2002) conducted the study on relationship between college students use of face book on their academic achievement. The researchers surveyed 219 students, including 102 undergraduate students at Ohio state and 117 graduate students. Findings showed that 79 percent of face book users have impact on their academic performances or failed to graduate by age 22.

Kubey, Lavin & Barrows (2001) suggest that, those who reported having their IM and cell phone open on while they did their home work tended to also have lower grades.

Harish et al., (2000) reports that the internet target population was the student of college level. Sample consisting of 900 students from 30 colleges of division Bahawalpur was taken 30 students from each college, (15 each from 3rd4th year class) were selected randomly. A questionnaire on a Five point likert scale was developed to collect the data about the internet addiction. The data was analyzed by using percentage and standard deviation. An over all analysis was done. All the items included in the questionnaire were analyzed separately [N = 990] finding on the basis of analysis.

1. Teenagers from 16-18 year old students are more internet users than that of other student
2. Male students users are internet than that of female students
3. The majority of the students waste their money by using internet without any useful purpose.
4. Only a few students watch educational sites

Linda et.al, (Dec2000) conducted a longitudinal field study designed to examine the Home internet use influence on the Academic performance . Participants were 140 children, mostly African American (83%), mostly boys (58%) ages ranged between 10 and 8 years. Internet use was continuously recorded, and multiple measures of academic performance were obtained. During 16 month trial findings indicated that children who used internet more had lower scores than children who used it less.

Dr. Gandhi's, (2000) suggest that children under the age of sixteen should not be allowed to use a cell phone because they are significantly more vulnerable to suffer health risks and poor academic performance because "The radiation plume that emanates from a cell phone antenna penetrates much deeper into the heads of children than adults.

Robert J. Hancock et.al., (1999) conducted a study on excessive television viewing in childhood has been associated with adverse effects on health, behavior and educational achievement. The study was conducted in Dunedin, New Zealand. The participants were 1000 individuals. The results concluded that television viewing in childhood and adolescence is associated with poor educational achievement. Excessive television viewing may have long lasting adverse consequences for educational achievement and subsequent socio economic status and well being.

Griffths & Hunts (1998), conducted a study, video games on academic performance their findings reported as, one in five adolescents were dependent on computer game (N=387, 58% male, 42% female) boys played significantly more regularly than girls, and were more like to be classified as dependent. (607 8th & 9th grade students participated in the study. Participants completed several self-measures, including a measure of video game habits. The measure was a seven item scale of addiction rated on 3 point liker scale. Addicted adolescents spend more time playing video games [$t(341) = -13.17, P < 0.000$] males were significantly more likely to be addicted than females ($X^2(1,345) = 42.86, P < 0.000$). Addicted adolescents reported lower academic grades [$t(337) = 5.035, P < 0.000$] addicted adolescents had higher hostile attribution scores [$t(347) = 4.14, P < 0.000$].

Levine (1996) reported that more than half of US students watch more than three hours of TV per day or week days and 60% of parents rarely or never limit their child's television viewing habits. The average television weekly viewing time is approximately 27 hours per week, while the average reading time is 8%.

Fisler's (1994) conducted a research on video game addiction. The results indicated that 6% of the sample (N=460, 48% male, 52% female) was defined as pathological payers. Males played more video games over all, but significant gender bias was not found.

Patric (1991) discovered that higher school social studies achievement is associated with "Limited television viewing". Felter (1984) reported that achievement scores in reading, maths and written expression were "sharply lower" among students who viewed more than six hours of television.

(Angle 1981) studies support the finding that children watch too much TV and read too little. It has been founded that high levels of viewing might include the promotion of "unintelligent consumerism" and a physically and intellectually passive dependency among our youth.

Studies related to electronic gadget excessive use and family interaction:

Robert S, Wesskrich,(2009) professor of literal studies at California state university conducted a survey of 196 pairs of parents and their sons/daughter found that the use of cell phones did not allow for quality communications between parents and children in place for face to face conversation adolescents who don't called their parents to seek support generally reported they did not had better relationships.

Erik, (2007) reported that the emergence of cell phone as activities communications devices has not only expended the ways in which people can interact with each other, but has also affected people's relationships. Cell phones have given people more control over when they interact with other people made it more possible for people to carry on long distance romantic relationships and even affects people's dating compatibility in some cases. In addition, cell phones have allowed adolescents to be more autonomous.

Olson et.al., (1983) conducted a research on parent child interactions his study findings reported that, parents with greater shared activities or positive interactions with their children are more likely to have better relationship with their children.

The national survey of children's health (2003-2004) conducted a telephone survey in valuing 102,353 interviews. One child under the age of 18 was randomly selected in each house hold as the subjects of the survey. The parent or guardian of the child served as the respondent. Data were collected by the maternal child and health bureau in collaboration with the national center for health statistics. The finding study revealed that, 87% of the parents reported that they didn't have close relationship with their children. Only 47% of parents reported that they can share and talk very well about things that really matter with their children. Nearly 37% parents reported that they have met either most of all of their children's friends.

A study conducted by the Japan education and technology society have conclusively demonstrated that the longer a Childs exposure to electronic visual media the poorer their academic records and poor parent child relationships.

CHAPTER – III

RESEARCH METHODOLOGY

This chapter deals with the description of methodology and various steps adopted to collect and organize data for the study. Research methodology involves the research approach, research design, setting of the study, sample and sampling technique, description of the tool, pilot study, data collection procedures and plan for data analysis.

RESEARCH APPROACH:

The research approach used for this study was descriptive survey.

RESEARCH DESIGN:

The research used for this study was a descriptive correlational research design.

SETTING OF THE STUDY:

This study was conducted in Michael Matriculation Higher Secondary School at Madurai. It is situated in PNT Nagar extension. The school is 10 kms away from Sacred Heart Nursing College. The total strength of the school is 1000 and more than 45 teachers are working there. The school has good infrastructure and all other facilities. This school provides to education from LKG – XII standard. Hostel facilities are available for the boys and girls separately. The school has good transport facilities. The setting was chosen because of the researchers accessibility to sample and feasibility of conducting study.

SAMPLE SIZE:**Phase I:**

All (207) adolescents were selected from IX, X, XI, XII standard to identify the level of electronic gadget excessive use.

Phase II:

100 Adolescents with excessive use were selected from Phase I to find out the academic performance and family interaction.

SAMPLING TECHNIQUE:**Phase I:**

Total enumerative sampling technique was used.

Phase II:

Convenient sampling technique was used.

CRITERIA FOR SAMPLE SELECTION:

The sample was selected based on the following criteria.

Inclusion Criteria:

1. Students who are studying in selected school at Madurai.
2. All students who are willing to participate in this study.
3. Adolescents in the age group of 13-19 years.

Exclusion Criteria:

1. Students who are not physically well during the time of data collection
2. Students who are very irregular.

RESEARCH TOOL AND TECHNIQUE:

Based on the objectives a rating scale was prepared to assess the electronic gadget excessive use and family interaction.

DESCRIPTION OF THE TOOL AND SCORING PROCEDURE:

The tool used for this study consists of four parts.

Part I:

It consists of demographic variables such as age, sex, standard, education of the parents, occupation of the parents, monthly income, religion, No. of children in the family, availability of devices, hobbies, outdoor activities and social gathering.

Part II:

5 point Likert scale was used to identify the electronic gadget excessive use which consists of four electronic gadgets which is categorized as

1. Television
2. Mobile
3. Videogames
4. Cell phone

Each division consists of 10 questions and has 5 alternatives. They are rarely, occasionally, frequently, often and always. The score was given as 1,2,3,4,5 respectively. Total attainable score was 50 and the score was interpreted as follows.

1-7	-	Average use
18-34	-	Moderate use
35-50	-	Excessive use

Part III:

The data on the level of academic performance was assessed through record analysis. That is the marks obtained by the students in the past three terminal examination (quarterly, half yearly and annual) conducted by their respective school. The marks will be expressed in percentage and interpreted as follows.

Good Academic performance	-	75%
Average academic performance	-	60-75%
Poor academic performance	-	< 50%

Part IV:

The data on the level of family interaction was assessed through 5 point likert scale which has 20 items and has five alternatives and they are rarely, occasionally, frequently, often, always and scored as 1,2,3,4,5 respectively. Total attainable score is 100 and it is interpreted as follows.

20-49	-	Poor interaction
50-79	-	Moderately adequate interaction
80-100	-	Adequate interaction

TESTING OF THE TOOL:**Content Validity:**

To evaluate the content validity, the tool was submitted to five experts in the field of psychiatric nursing, child health nursing and psychiatrist. They validated the tool I & II regarding the adequacy of the content, the sequence of the content and framing of questions. Approval was obtained from all experts & based on the experts suggestions the tool and got its final form. Selection of experts was done based on their experience and clinical expertise.

Reliability:

The reliability of the measuring instrument is a major criterion of assessing its quality accuracy and adequacy. For the present study, the reliability of tool was established by split half method. The spearman's coefficient correlation showed $r = 0.96$. Hence the tool was highly reliable and was used for the study.

PILOT STUDY:

A pilot study is a small preliminary investigation of the same general character of the main study. To assess the feasibility & practicability, a pilot study was conducted on 10 adolescents in the same setting. Pilot study revealed that the study was feasible. The samples in the pilot study were not used in the original study.

DATA COLLECTION PROCEDURE:

The investigator obtained an approval from the dissertation committee and from the departmental heads of psychiatric nursing to conduct the study.

Then a formal permission was obtained from the principal of the respective institutions to conduct the study. The samples were selected & consent was obtained from all the study samples.

The investigator after establishing rapport with the study samples explained the purpose of filling the rating scale. Then the data were collected.

Each day 6 to 8 samples were given the rating scale. The duration given for each subject was 30 minutes.

The respondents were cooperative and the researcher thanked them for their cooperation and participation in the study.

DATA COLLECTION PROCESS:

Week I	=	Identification and selection of study samples
Week II , Week III	=	Assessing the level of electronic gadget excessive use, family interaction and their level of academic performance.
Week IV & Week V	=	Assessing the level of electronic gadget excessive use, family interaction and their level of academic performance.
Week IV	=	Assessing the level of electronic gadget excessive use, family interaction and their level of academic performance.

PLAN FOR DATA ANALYSIS:

The data analysis was planned according to the objectives of the study by using descriptive and inferential statistics.

Descriptive Statistics:

Frequency, percentage and mean were used for the analysis of electronic gadget excessive use.

Inferential Statistics:

Correlation was used to find out the relationship between electronic gadget excessive used and academic performance and chi-square test was used to find the association between electronic gadget excessive use and demographic variables.

PROTECTION OF HUMAN RIGHTS:

The investigator obtained approval from the dissertation committee of the college. The consent was obtained from all the study samples and data collected was kept confidential. Assurance was given to the study samples that anonymity of each individual would be maintained.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the description of the sample, analysis, and interpretation of the data collected and the achievement of the objectives of the study.

The data collected was analyzed by using descriptive and inferential statistics which are necessary to provide a substantive summary of results in research to the objectives.

The data collected was tabulated and presented as follows

Section – I:

The section deals with the demographic characteristics (Table 1).

Section – II:

The gives the description regarding the level of electronic gadget use (Table 2).

Section – III:

The gives the description regarding the level of academic performance (Table 3).

Section – IV:

The gives the description regarding the level of family interaction (Table 4).

Section – V:

The gives the description regarding the correlation between electronic gadgets excessive use and family interaction (Table 5).

Section – VI:

This gives the description regarding the correlation between electronic gadgets excessive use and academic performance (Table 6).

Section – VII:

This provides the association between cell phone and demographic variables (Table 7a).

Section – VIII:

This provides the association between television and demographic variables (Table 7b).

Section – IX:

This provides the association between video games and demographic variables (Table 7c).

Section – X:

This provides the association between internet and demographic variables (Table 7d).

SECTION – 1

Table 1:**Distribution of adolescents based on their demographic variables.**

N=100		
Demographic variables	F	%
Age (in years)		
a) 13-16 yrs	36	36
b) 16-18 yrs	64	64
Sex		
a) Male	73	73
b) Female	27	27
Standard		
a) 9 th	20	20
b) 10 th	10	10
c) 11 th	35	35
d) 12 th	35	35
Education of Father		
a) Illiterate	3	3
b) Primary	3	3
c) High/Higher Secondary	11	11
d) Diploma/degree	83	83
Education of Mother		
a) Illiterate	1	1
b) Primary	-	-
c) High/Higher Secondary	17	17
d) Diploma/degree	82	82

Occupation of father		
a) Coolie	-	-
b) Businessman	26	26
c) Government employee	32	32
d) Private employee	42	42
Occupation of Mother		
a) House wife	13	13
b) Coolie	-	-
c) Government employee	33	33
d) Private employee	54	54
Monthly income of family		
a) Rs.3000-5000	-	-
b) Rs.5001-7000	16	16
c) Rs.7001-9000	36	36
d) Rs.9000 & Above	48	48
Religion		
a) Hindu	50	50
b) Muslim	10	10
c) Christian	40	40
No of children in family		
a) 1	59	59
b) 2	37	37
c) 3	4	4
Order of Birth		
a) 1	58	58
b) 2	38	38
c) 3	4	4

Table 1 to be contd....

Place of residence		
a) Rural	9	9
b) Urban	91	91
Type of family		
a) Nuclear Family	91	91
b) Joint family	6	6
c) Extended family	3	3
Hobbies		
a) Reading Books	38	38
b) Chatting on the Net	34	34
c) Others	28	28
Outdoor activities		
a) Cricket	61	61
b) Spending time with friends	39	39
Social gathering		
a) Going to religious places	43	43
b) Attending family festivals	26	26
c) Attending parties	21	21
d) Family tour	10	10

Table / Predicts that, the most of the samples (54%) were in the age group of 16-18 yrs where as 36% of them in the age group of 13-15 yrs .

With regard to the sex the higher percentage (73%) of the samples were male and rest of the (27%) samples were female.

The data obtained revealed that the higher secondary school students were using mostly (35%) electronic gadget compared by high school students (10%).

With regard to the education of father, the majority (83%) of them were diploma/degree holders where as each similar percentage (3%) were in illiterate and primary education.

With regard to the education of mother the majority (82%) of them were diploma/degree holders where as none of the samples are in primary education. However, only 1% of the samples are illiterate.

With regard to the occupation of the father, it predicts that the highest percentage (42%) of them were private employees whereas 26% and 32% of them were Businessman and Government employees. However, none of them are coolie.

With regards to the occupation of mother it depicts that the majority of them (54%) were private employees and 33% of them were Government employee whereas only 13 % of them were house wife and none of them were coolie.

With regards to the monthly income the majority (48%) of them earned a monthly income between Rs.5000-7000 and none of them were between Rs.3000-5000.

With regards to the religion the majority (50%) of the samples were belongs to Hindu and Christian religion, whereas only 10% of the samples were Muslim.

With regards to the No. of children in the family it depicts that the Majority (59%) of the samples were only one child (37%) of the samples have one sibling and only 4% of the samples have two siblings in their family.

With regards to order of birth it shows that the majority (58%) of the samples were first child in their family, 38% of the samples were 2nd child whereas only 4% were 3rd child in there family.

With regarding to place of residence, most (91%) of the samples were residing in urban area and rest of (9%) of the samples were residing in rural area.

With regards to the type of family, it predicts that most (91%) of the samples were belongs to nuclear family and more or less similar 6% and 3% of the samples were belongs to joint and extended family respectively.

With regards to availability of devices, all (100%) of them had television/mobile in their family, and (52%) of them had internet connection whereas (48%) of them had video games in their family.

The majority (38%) of the samples had hobbies of reading books, (34%) of the samples had hobbies of chatting on the net and (28%) of the samples had other hobbies like.

Fig. 3 Distribution of the adolescents according to their standard

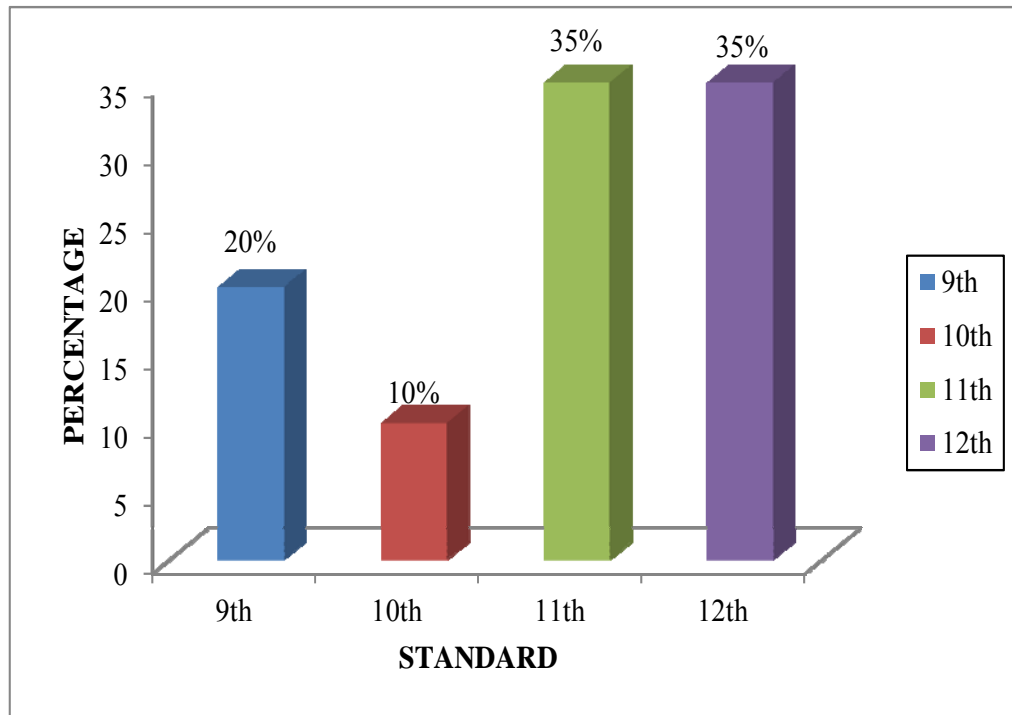


Fig. 5 Distribution of adolescents according to their type of family

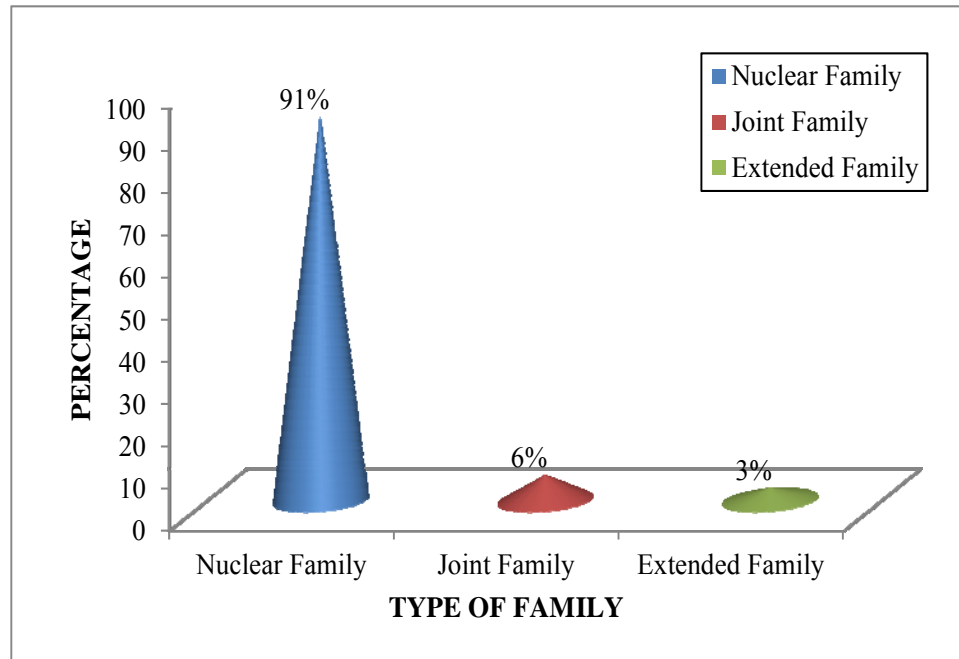


Fig. 2 Distribution of adolescents according to their sex

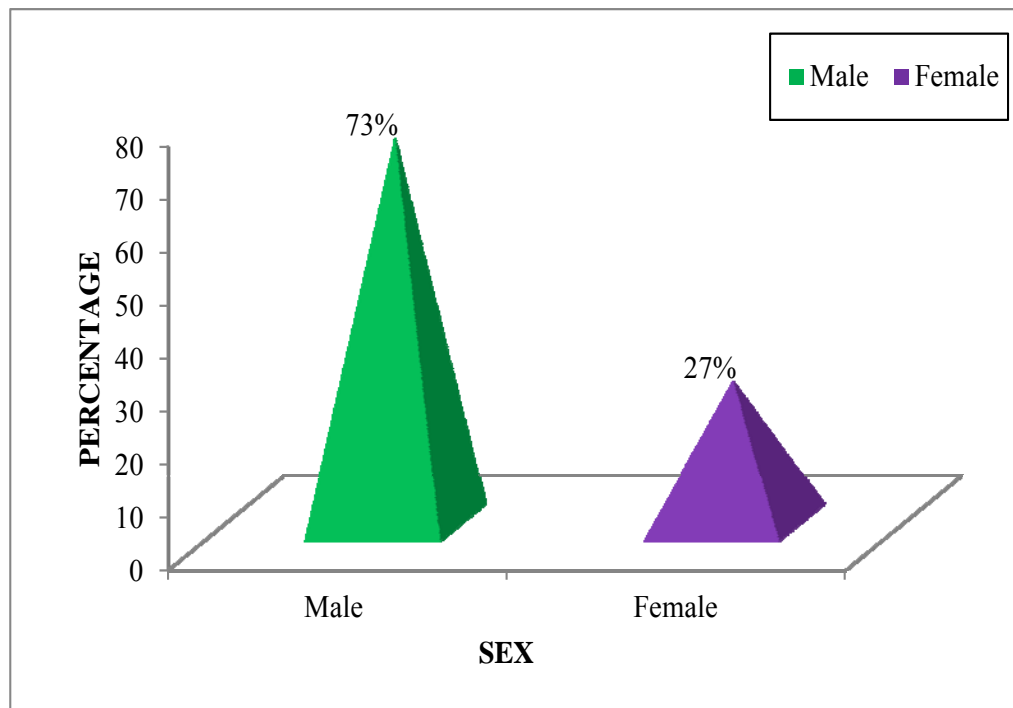


Fig. 4 Distribution of adolescents according to their order of birth

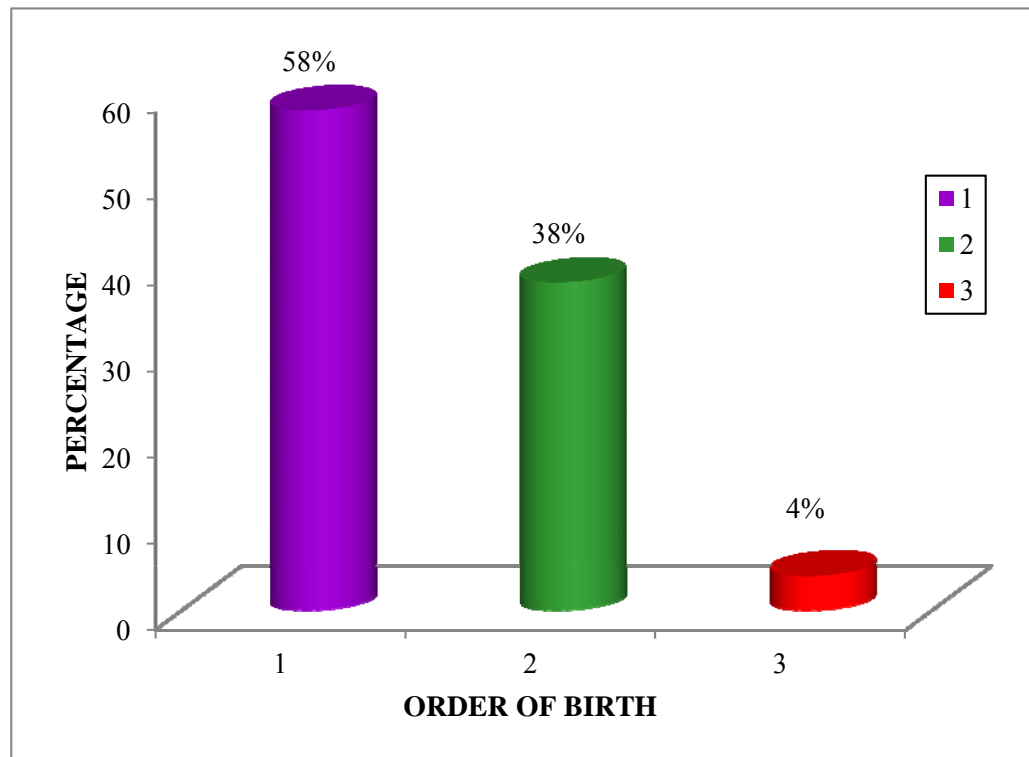


Table 2
Distribution of Adolescents according to their level of electronic gadget use

N =100

Level of electronic gadget use	Frequency	Percentage
Average Use	44	21%
Moderate Use	63	31%
Excessive Use	100	48%

From table 2 it can be inferred that, the Majority (48%) of the samples were using electronic gadget excessively, (31%) of them were using moderately, whereas only (21%) of the samples were using averagely.

Table 3 :**Distribution of adolescents according to their level of academic performance****N= 100**

Level of academic performance	Academic performance	
	F	%
Good academic performance	33	33
Average academic performance	57	57
Poor academic performance	10	10

Table 3; it can be inferred that the majority (57%) of the Samples had Average academic performance (33%) of the samples had good academic performance only 10% of the samples had poor academic performance.

Table : 4**Distribution of adolescents according to their level of family interaction****N = 100**

Level of family interaction	Family interaction	
	f	%
Poor interaction	98	98
Moderately adequate interaction	2	2
Adequate interaction	--	--

From the table 4. it can be inferred that, all most all (98%) of them had poor family interaction & only 2% of the samples had moderately adequate family interaction.

Table 5: Correlation between electronic gadgets excessive use and Family interaction

VARIABLES	Mean	SD	'r' value
Cell phone	22.31	3.09	-0.211*
family interaction	34.96	5.09	
Television	23.85	4.87	-0.249*
family interaction	34.96	5.09	
Video games	14.01	2.46	-0.475*
family interaction	34.96	5.09	
Internet	15.59	2.67	-0.436*
family interaction	34.96	5.09	

To find out the relationship between electronic gadget excessive use and family interaction, the null hypothesis was stated as follows.

There will be no statically significant negative relationship between electronic gadgets excessive use and family interaction.

Tables 5 shows that there was a statistically significant negative relationship between family interaction and Cell phone ($r = -0.211$), Television ($r = -0.249$), Video games ($r = -0.475$) & Internet ($r = -0.436$) at 0.05 level of significance. Therefore the researcher accepted the research hypothesis and rejected the null hypothesis.

Table-6: Correlation between Electronic Gadgets excessive use and Academic performance

VARIABLES	Mean	SD	'r' value
Cell phone	22.31	3.09	-0.265*
Academic Performance	69.18	12.86	
Television	23.85	4.87	-0.213*
Academic Performance	69.18	12.86	
Video Games	14.01	2.46	-0.269*
Academic Performance	69.18	12.86	
Internet	15.59	2.67	-0.262*
Academic Performance	69.18	12.86	

To find out the relationship between electronic gadget excessive and academic performance, the null hypothesis was stated as follows.

There will be no statistically significant negative relationship between electronic gadget excessive use and academic performance.

Table 6 shows that there was a statically significant negative relationship between the academic performance and cell phone ($r = -0.265$), Television ($r = -0.213$) videogames ($r = -0.269$) & internet ($r = -0.262$) at 0.05 level of significance. Therefore the Researcher accepted the research hypothesis and rejected null hypothesis.

Table: 7(a) Description of the association between electronic gadget on cell phone among adolescents and demographic variable

N=100

Demographic Variables		N	Average use	Moderate use	χ^2 value
Age	13-15 yrs	36	1	35	1.504
	16-18 yrs	64	6	58	
Sex	Male	73	4	69	0.9602
	Female	27	3	24	
	9 th	20	0	20	
Standard	10 th	10	1	9	5.42
	11 th	35	5	30	
	12 th	35	1	34	
	Illiterate	3	0	3	
Education of father	Primary	3	0	3	1.542
	High school /higher secondary	11	0	11	
	Diploma/degree	83	7	76	
	Illiterate	1	0	1	
Education of mother	Primary	0	0	0	0.771
	High school /higher secondary	17	2	15	
	Diploma/degree	82	5	77	

Table 7a to be contd...

Occupation of father	Coolie	0	0	0	
	Businessman	26	2	24	
	Government employee	32	2	30	0.0481
	Private employee	42	3	39	
Occupation of mother	House wife	13	1	12	
	Coolie	0	0	0	
	Government employee	33	3	30	0.404
	Private employee	54	3	51	
Family monthly Income	Rs.3000-5000	0	0	0	
	Rs .5001-7000	16	2	14	
	Rs. 7001-9000	36	2	34	0.9003
	Above Rs.9000	48	3	45	
Religion	Hindu	50	5	45	
	Muslim	10	0	10	1.689
	Christian	40	2	38	
No of children	1	59	6	53	
	2	37	1	36	2.2611
Place of residence	Rural	9	2	7	
	Urban	91	5	86	3.5203
Type of family	Nuclear family	91	7	84	
	Joint family	0	0	6	0.744
	Extended family	3	0	3	

Table 7a to be contd...

Hobbies	Reading books	38	1	37	
	Chatting on the net	34	5	29	4.741
	Others	28	1	27	
Outdoor activities	Cricket	61	5	56	
	Spending time with friends	39	2	37	0.386
Social gathering	Going to religious places	43	2	41	
	Attending family festivals	26	3	23	2.45
	Attending parties	21	2	19	
	Family tour		0	10	

To determine the association of electronic gadgets use on “Cellphone” with the demographic variables of adolescents, the null hypothesis was stated as follows.

There will be no statistically significant association between the level of electronic gadget use on “Cell Phone” and the demographic variables of adolescents.

Table7a portrays that there was no statistically significant association between the electronic gadget use on “Cell Phone” and age ($\chi^2 = 1.504$), Sex ($\chi^2 = 0.9602$), Standard ($\chi^2 = 1.542$), Education of mother ($\chi^2 = 0.771$), Occupation of father ($\chi^2 = 0.048$) occupation of mother ($\chi^2 = 0.404$) income ($\chi^2 = 0.9003$) Religion ($\chi^2 = 1.689$), No of Children ($\chi^2 = 2.2611$), order of birth ($\chi^2 = 2.412$) Place of residence ($\chi^2 = 3.52$) Type of family ($\chi^2 = 0.744$), hobbies ($\chi^2 = 4.74$) outdoor activities ($\chi^2 = 0.386$) and social gathering ($\chi^2 = 2.45$). Thus the researcher rejected the research hypothesis and accepted the Null hypothesis.

Table : 7(b) Association between electronic gadget on Television among adolescents and demographic variables

N=100

Demographic Variables		N	average use	moderate use	Excessive use	χ^2 value
Age	13-15 yrs	36	2	29	5	9.358*
	16-18 yrs	64	4	60	0	
	Male	73	4	64	5	
Sex	Female	27	2	25	0	2.025
	9 th	20	0	15	5	
	10 th	10	2	8	0	
standard	11 th	35	3	32	0	26.24*
	12 th	35	1	34	0	
	Illiterate	3	0	3	0	
Education of father	Primary	3	0	3	0	5.816
	High school /higher secondary	11	0	9	2	
	Diploma/degree	83	6	74	3	
Education of mother	Illiterate	1	0	1	0	6.99
	Primary	0	0	0	0	
	High school /higher secondary	17	1	13	3	
	Diploma/degree	83	5	75	2	

Table 7b to be contd...

Occupation of father	Coolie	0	0	0	0	
	Businessman	26	2	23	1	
	Government employee	32	1	30	1	1.469
	Private employee	42	3	36	3	
Occupation of mother	House wife	13	0	13	0	
	Coolie	0	0	0	0	
	Government employee	32	1	30	2	3.257
	Private employee	54	5	46	3	
Family monthly Income	Rs.3000-5000	0	0	0	0	
	Rs .5001-7000	16	0	14	2	
	Rs. 7001-9000	36	2	34	0	5.351
	Above Rs.9000	48	4	41	3	
Religion	Hindu	50	5	43	2	
	Muslim	10	1	8	1	4.903
	Christian	40	0	38	2	
No of children	1	59	4	53	2	
	2	37	2	32	3	1.627
Order of birth	1	58	4	52	2	
	2	38	2	33	3	1.545
	3	4	0	4	0	
Place of residence	Rural	9	2	5	2	
	Urban	91	4	84	3	1.545

Table 7b to be contd...

Type of family	Nuclear family	91	6	80	5	
	Joint family	6	0	6	0	1.224
	Extended family	3	0	3	0	
Hobbies	Reading books	38	3	33	2	
	Chatting on the net	34	3	29	2	23.15*
	Others	28	0	27	1	
Outdoor activities	Cricket	61	5	52	4	
	Spending time with friends	39	1	37	1	2.292
	Going to religious places	43	3	39	1	
Social gathering	Attending family festivals	26	1	23	2	2.195
	Attending parties	21	1	19	1	
	Family tour	10	1	8	1	

To determine the association of electronic gadget use on “Television” with the demographic variables of adolescents, the null hypothesis was stated as follows,

There will be no statistically significant association between the electronic gadget use on “Television” and the demographic variables of adolescents.

Table 7b describes that there was a statically significant association between the electronic gadget use on “Television” and age ($\chi^2 = 9.358$), standard ($\chi^2 = 26.24$) place of residence ($\chi^2 = 11.45$), Hobbies ($\chi^2 = 23.15$) at 0.05 level of significance. There fore the researcher accepted the research hypothesis and rejected the null hypothesis.

There was no significant association between the electronic gadget use on “Television” and sex ($\chi^2 = 2.025$), Education of father ($\chi^2 = 5.814$), Education of Mother ($\chi^2 = 6.99$) occupation of father ($\chi^2 = 5.814$) Education of mother ($\chi^2 = 3.257$) income ($\chi^2 = 5.351$) Religion ($\chi^2 = 4.903$) No of children ($\chi^2 = 1.627$) order of birth ($\chi^2 = 1.545$) Type of Family ($\chi^2 = 1.224$) Outdoor activities ($\chi^2 = 2.292$) & Social gathering ($\chi^2 = 2.195$) at 0.05 level of significant. Thus the researcher rejected the research hypothesis and accepted the null hypothesis.

Table : 7(c) Description of the association between electronic gadget on Video games among adolescents and demographic variables

N=100

Demographic Variables		N	average use	moderate use	χ^2 value
Age	13-15 yrs	36	27	9	14.06*
	16-18 yrs	64	63	1	
Sex	Male	73	64	9	1.629
	Female	27	26	1	
Standard	9 th	20	14	6	14.60*
	10 th	10	8	2	
	11 th	35	33	2	
	12 th	35	35	0	
Education of father	Illiterate	3	2	1	3.866
	Primary	3	2	1	
	High school /higher secondary	11	10	1	
	Diploma/degree	83	76	7	
Education of mother	Illiterate	1	0	1	13.85*
	Primary	0	0	0	
	High school /higher secondary	17	13	4	
	Diploma/degree	82	77	5	

Occupation of father	Coolie	0	0	0	
	Businessman	26	2	24	
	Government employee	32	2	30	0.0481
	Private employee	42	3	39	
Occupation of mother	House wife	13	12	1	
	Coolie	0	0	0	
	Government employee	33	30	3	0.1813
	Private employee	54	48	6	
Income	Rs.3000-5000	0	0	0	
	Rs .5001-7000	16	16	0	
	Rs. 7001-9000	36	32	4	2.461
	Above Rs.9000	48	42	6	
Religion	Hindu	50	41	9	
	Muslim	10	9	1	8.00*
	Christian	40	40	0	
No of children	1	59	54	5	
	2	37	33	4	1.179
	3	4	3	1	
Order of birth	1	58	54	4	
	2	38	33	5	2.042
	3	4	3	1	

Table 7c to be contd...

Place of residence	Rural	9	7	2	1.642
	Urban	91	83	8	
Type of family	Nuclear family	91	81	10	
	Joint family	6	6	0	1.099
	Extended family	3	3	0	
Hobbies	Reading books	38	34	4	
	Chatting on the net	34	28	6	5.332
	Others	28	28	0	
Outdoor activities	Cricket	61	53	8	
	Spending time with friends	39	37	2	11.95*
Social gathering	Going to religious places	43	39	4	
	Attending family festivals	26	23	3	0.097
	Attending parties	21	19	2	
	Family tour	10	9	1	

To determine the association of electronic gadget use on “Video games” with the demographic variables of adolescents, the null hypothesis was stated as follows.

These will be no statistically significant association between the electronic gadget use on “Video games” and the demographic variables of adolescents.

Table 7c shows that there was a statistically significant association between the electronic gadget use on “Video games” and age ($\chi^2=13.85$) outdoor activities ($\chi^2=11.95$) Religion ($\chi^2=8.00$) at 0.05 level of significance. Therefore the researcher accepted the research hypothesis and rejected the null hypothesis.

There was no significant association between the electronic gadget use on “Video games” and sex ($\chi^2=1.629$), Education of father ($\chi^2=3.866$) occupation of father ($\chi^2=0.377$), occupation of mother ($\chi^2=0.1813$) income ($\chi^2=2.461$) No. of Children ($\chi^2=1.642$) type of family ($\chi^2=1.099$), Hobbies ($\chi^2=5.332$) & Social gathering ($\chi^2=0.097$). Thus the researcher rejected the research hypothesis and accepted the null hypothesis.

Table – 7(d) Description of the association between electronic gadget on Internet among adolescents and demographic variables

N=100

Demographic Variables		N	average use	moderate use	χ^2 value
Age	13-15 yrs	36	26	10	1.558
	16-18 yrs	64	53	11	
Sex	Male	73	55	18	2.18
	Female	27	24	3	
Standard	9 th	20	11	9	13.33*
	10 th	10	10	0	
	11 th	35	26	9	
	12 th	35	32	3	
Education of father	Illiterate	3	3	0	2.786
	Primary	3	2	1	
	High school /higher secondary	11	7	4	
	Diploma/degree	83	67	16	
Education of mother	Illiterate	1	0	1	4.846
	Primary	0	0	0	
	High school /higher secondary	17	12	5	
	Diploma/degree	82	67	15	

Table 7d to be contd...

Occupation of	Coolie	0	0	0	
father	Businessman	26	20	6	
	Government employee	32	25	7	0.179
	Private employee	42	34	8	
Occupation of	House wife	13	11	2	
mother	Coolie	0	0	0	
	Government employee	33	29	4	3.311
	Private employee	54	39	15	
	Rs.3000-5000	0	0	0	
Income	Rs. 5001-7000	16	11	5	
	Rs. 7001-9000	36	31	5	2.217
	Above Rs.9000	48	37	11	
Religion	Hindu	50	37	13	
	Muslim	10	7	3	2.984
	Christian	40	35	5	
No of children	1	59	43	16	
	2	37	32	5	3.645
	3	4	4	0	

Table 7d to be contd...

Order of birth	1	58	43	15	
	2	38	32	6	2.512
	3	4	4	0	
Place of residence	Rural	9	3	6	
	Urban	91	76	15	12.43*
Type of family	Nuclear family		71	20	
	Joint family		6	0	1.923
	Extended family		2	1	
Hobbies	Reading books		31	7	
	Chatting on the net		23	11	9.563*
	Others		25	3	
Outdoor activities	Cricket		47	14	
	Spending time with friends		32	7	4.524*
Social gathering	Going to religious places		35	8	
	Attending family festivals		22	4	1.856
	Attending parties		15	6	
	Family tour		7	3	

To determine the association of electronic gadget use on “Internet” with the demographic variables of adolescents the null hypothesis was stated as follows.

There will be no statistically significant association between the level of electronic gadget use on “Internet” and the demographic variables of adolescents.

Table 7d shows that there was a statistically significant association between the electronic gadget use on “Internet” and standard ($\chi^2=13.33$), outdoor activities ($\chi^2=4.524$) place of residence ($\chi^2=12.43$) Hobbies ($\chi^2=9.563$) at 0.05 level of significance. Therefore the researcher accepted the research hypothesis and rejected the null hypothesis.

There was no significant association between the electronic gadget use on “Internet” and Age ($\chi^2=1.558$), sex ($\chi^2=2.18$) Education of father ($\chi^2=2.786$) Education of mother ($\chi^2=4.846$), occupation of father ($\chi^2=0.179$) occupation of mother ($\chi^2=3.311$), income ($\chi^2=2.217$) Religion ($\chi^2=2.984$), No. of Children ($\chi^2=3.645$), order of birth ($\chi^2=2.512$) type of family ($\chi^2=1.923$) & Social gathering ($\chi^2=1.856$). Thus the researcher rejected the research hypothesis and accepted the null hypothesis.

CHAPTER V

DISCUSSION

The main purpose of this study was to assess the influence of electronic gadget excessive use on Academic performance and family interaction among adolescents in selected schools at Madurai. The study consisted of 100 samples. The tool used for this study was 5 point likert scale to assess the electronic gadget excessive use and family interaction and academic performance was assessed through the record analysis. The findings of the study are discussed in this chapter with reference to the objectives of the study.

Regarding the demographic variables of Adolescents

Most of the samples (64%) were in the age group of 16-18yrs. More than (73%) of the samples were male. Most (35%) of the higher secondary school students were using the electronic gadgets. Most (83%) of the samples father and (82%) mother were graduates. Most (42%) of the samples father and (54%) mother were private employees. Majority of the samples (48%) had family monthly income of Rs.5000-7000. Half of the samples (50%) were Hindu. Most of the samples (37%) were one child in their family. majority of the samples (38%) were first child in their family. Most (91%) of the samples were from urban area. Majority (91%) of the samples were from nuclear family. All (100%) of the samples were using television / Mobile. Most (38%) of the samples had the hobbies of reading books. Large proportion (61%) of the samples were playing cricket. Most (43%) of the samples were going to religious places.

The first objective of the study was to find out the level of electronic gadget excessive use among Adolescents.

The Majority (48%) of the samples were using electronic gadget excessively (31%) of the samples were using moderately and only 21% of the samples were using averagely.

ASSOCHAM a country wide survey on “Tech Toy Addictions” said that easy availability of technology coupled with lack of parental supervision is a significant reason for this ever increasing menace of technology addiction.

Martin, youth and education researcher said that Adolescents use different modes of electronic gadgets in different social contexts (70%) use social networking website, (31%) play video games, (25%) share secrets and feel comfortable in using cell phones and (33%) interested in watching television.

The second objective of the study was to findout the level of academic performance among adolescents excessively using electronic gadget.

The findings related to this objective are described in table 3. From table 3 it can be inferred that majority (57%) of the samples had average academic performance (10%) of the samples had poor academic performance and interestingly(33%) of the samples had good academic performance.

Siji Abraham (1998) revealed that (70%) of the children who watch television excessively have deleterious effects on learning and academic performance. Canadian pediatric society (cps) and the Media Awareness Network (2001) found that watching television takes time away from reading and school work and affects Childs’ developmental level.

R.Suda (2009) in her study “effect of playing violent video games on children founded that repeated exposure co mediated violence will increase in aggression, fear and Low academic performance.

Linder, J.R., and Walsh, D.A. (2004) in their study conducted that adolescents who expose themselves to greater amount of video were more of hostile, were more clay to be involved in physical fights and performed poorly in school. These studies support the present study.

In south Korea, where some of the most interesting research on internet addiction has been published there said to have approximately of 10,000 children aged 6-18 who were addicted of this addiction and were requiring treatment of these children with psychotropic the rest required hospitalization.

Hittin(2005) conducted a study on “grade fluctuation and cell phone use” he found that there is a grade fluctuation among those who put off doing their home work to spend timing in cell phone or text messaging.

The Third objective of the study was to findout the level of family interaction among adolescents excessively using electronic gadget.

Table 4 revealed the level of family interaction among adolescents excessively using electronic gadget.

The levels of family interaction are categorized into, poor, moderately Adequate and adequate family interaction. All most (98%) of the samples had poor family interaction, and (2%) of the samples had moderately adequate family interaction and shockingly none of the samples had adequate family interaction.

Rabin et al., (2005) found that 75% of American Teenagers today have cellphone, often purchased by their parents, which affects the dynamic of parent child relationship.

Naomi Barons (2006) an American University, Professor of linguistics who has studied the effect of technology on peoples inter personal and family relationships found that technology have allowed adolescents to be more autonomous from their parents and they are less interested in having face to face interactions and it is impacting the social lives of children.

The fourth objective of the study was to find out the relationship between electronic gadget excessive use and academic performance among adolescents excessively using electronic gadget.

Table 6 depicts the relationship between electronic gadget excessive use and academic performance. The obtained 'r' value for cell phone ($r = -0.265$), television ($r = -0.213$) videogames ($r = -0.269$), Internet ($r = -0.262$), which was significant at 0.05 level. It implies that there is a relationship between electronic gadget excessive use and academic performance. Since the obtained 'r' value is higher than the table value. Thus the researcher accepts the research hypothesis and rejects the null Hypothesis.

These findings were consistent with the study done by Reddy, D.Janarthna, (2001) on Media & its impact on Academic Performance. The study revealed that regular use of Media in 80% children had resulted in lower grades.

The fifth objective of the study was to find out the relationship between electronic gadget excessive use and family interaction.

Table-5, depicts the relationship between electronic gadget excessive use and family interaction. The obtained 'r' value for Cell phone ($r = -0.211$), Television ($r = -0.249$), video games ($r = -0.475$), Internet ($r = -0.436$), Overall ($r = -0.461$) which was significant at 0.05 level. It implies that there is a relationship between electronic gadget excessive use and family interaction. Since the obtained 'r' value is higher than the table value. So the researcher accepts the research hypothesis and rejects the null hypothesis.

The sixth objective of the study was to find out Association between electronic gadget excessive use and demographic variables.

Association between Cell phone and Demographic variables.

Tables 7(a) shows that there was no Association between the electronic gadget use on "Cell phone" and demographic variables. Therefore the researcher rejected the research hypothesis and accepted the null hypothesis.

Association between Television and Demographic variables.

Table 7(b) represents that the variables such as age ($\chi^2 9.358$)*, standard ($\chi^2 26.24$)* place of residence ($\chi^2 11.45$)* and hobbies ($\chi^2 23.15$)* have significant association between the electronic gadget use on "Television" at 0.05 level of significance this supports the research hypothesis. Other demographic variables have no association. Therefore the researcher accepted the research hypothesis and rejected the null hypothesis.

Association between Video games and Demographic variables.

Table 7(c) represents that the variables such as age ($\chi^2=14.06^*$), Standard ($\chi^2=14.6^*$), education of mother ($\chi^2=13.85^*$) and out door activities ($\chi^2=11.95^*$) have significant association with the electronic gadget use on videogames at 0.05 level of significance. Other demographic variables have no association. So the researcher accepted the research hypothesis and rejected the null hypothesis.

Association between Internet and Demographic variables.

Table 7(d) shows that, the variables such as standard ($\chi^2=13.35^*$) outdoor activities ($\chi^2=4.524^*$), Place of residence ($\chi^2=12.43^*$) and Hobbies ($\chi^2=9.563^*$) have significant association with the electronic gadget use on internet at 0.05 level of significance. This supports the research hypothesis. Other demographic variables have no association. So the researcher accepted the research hypothesis and rejected the null hypothesis

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter deals with the summary of the study and conclusions drawn. It focuses on the implications for nursing research, nursing administration, and nursing education.

SUMMARY

This study was undertaken to assess the influence of electronic gadget excessive use on academic performance and family interaction among adolescents in selected schools at Madurai. This study was conducted in Michael Matriculation School at Madurai. The population of the study was adolescents excessively using electronic gadgets. Data were collected by using 5 point likert scale to assess electronic gadget excessive use and family interaction. Academic performance was assessed through record analysis. The sample size was 100.

Descriptive and inferential statistics [Frequency, percentage, Mean, Correlation and chi-square] was used to analyze the data.

MAJOR FINDINGS OF THE STUDY

➤ **Distribution of samples with regard to Demographic variables of adolescents.**

- ❖ Most of the samples (64%) were in the age group of 16-18 yrs. Majority (73%) of the samples were male. Most (35%) of the higher secondary students were using electronic gadgets.. Large proportion (83%) of father and (82%) of mother were graduates. Most of the samples (42%) of father and (54%) of mother were private employees. Most of the sample (48%) had monthly income of Rs.5000-7000. Most of the samples (37%) were one child majority of the samples (38%) were first child in the family. Most (91%) of the samples were from urban. Majority (91%) of the samples were from nuclear family. All (100%) of the samples were using television / Mobile. Most (38%) of the samples had the hobbies of reading books. Large portion (61%) of the samples were playing cricket. Most (43%) of the samples were going to religious places.

➤ **With regard to level of electronic gadget excessive use among adolescents**

- ❖ (48%) of the samples were using electronic gadget excessively.
- ❖ (31)% of the samples were using electronic gadget moderately.
- ❖ (21%) of the samples were using electronic gadget averagely.

➤ **With regard to level of academic performance among adolescents excessively using electronic gadget**

- ❖ 57% of the samples had average academic performance

- ❖ 33% of the samples had good academic performance.
- ❖ 10% of the samples had poor academic performance.

➤ **With regard to level of family interaction among adolescents excessively using electronic gadget**

- ❖ 98% of the samples had poor family interaction.
- ❖ 2% of the samples had moderately adequate family interaction.

➤ **With regard to correlation between the Electronic Gadget excessive use and academic performance**

- ❖ With regard to correlation Between electronic gadget excessive use and academic performance the obtained 'r' value on cell phone ($r = - 0.265$), video games ($r = - 0.269$), television ($r = - 0.213$) and internet ($r = - 0.262$) was significant at 0.05 level.
- ❖ With regard to correlation Between electronic gadget excessive use and Family interaction the obtained 'r' value on cell phone ($r = - 0.211$), Television ($r = - 0.213$), videogames ($r = - 0.269$), and Internet ($r = - 0.262$) was significant at 0.05 level.

➤ **With regard to association between electronic gadget excessive use and demographic variables.**

- ❖ There is no Association Between the cellphone and demographic variables.
- ❖ There was a statistically significant association between electronic gadget excessive use on Television age (*9.358), Standard (*26.24) place of residence (*11.45) & hobbies (*23.15) at 0.05 level.

- ❖ There was a statistically significant association between electronic gadget excessive use on videogames and age (14.06*) standard (14.6*) education of Mother (13.85*) and out door activities (11.95*) at 0.05 level.
- ❖ There was statistically significant association between electronic gadget excessive use on internet and standard (*13.35), outdoor activities (4.524*) place of residence, (12.43*) & hobbies (9.563*) at 0.05 level.

CONCLUSION

The study brought the following conclusion.

- 48% of the samples were using electronic gadget excessively
- 31% of the samples were using electronic gadget moderately.
- 21% of the samples were using electronic gadget averagely.
- 10% of the samples had poor Academic performance
- 98% of the samples had poor family interaction
- 2% of the samples had moderately adequate family interaction.

IMPLICATION

The findings of the study have several implications in the four areas namely nursing practice, nursing administration, nursing education and nursing research.

Implications for Nursing practice:

- The nurse can arrange awareness programme to the adolescents in various schools regarding the effects of excessive electronic gadget use.

- The psychiatric nurses need to take the responsibility of helping children and their parents in regulation of habits in order to minimize the influence of electronic gadget excessive use.
- Nurse can plan counseling sessions for the students regarding the adverse effects of excessive use electronic gadgets.
- The nurse can provide instructional module on effects of electronic gadget use on academic performance and family interaction to parents and school authorities.

Implications for Nursing Education

1. There should be greater emphasize in nursing curriculum about the impact of electronic gadget excessive use on growth and development of children.
2. The nurse educator can motivate the students to self evaluate parent child relationship
3. More over, each nurse should be able to give incidental teaching when opportunity arises.

Implications for nursing administrations:

1. The study will help the administrator in arranging continuing education programme to nurse regarding the assessment of electronic gadget excessive use and its health impacts.
2. Nurse administrators can encourage nursing staff to make contributions to the parents in various health settings in preventing the adverse effects of electronic gadget excessive use.

3. Nurse administrators can organize counseling programme in the hospital and community level on effects of electronic gadgets excessive use.

Implications for nursing Research

The findings of the present study have added knowledge to the already existing literature and implications for the nursing research are given in the form of recommendation. This study can be a baseline for future studies to Build upon and motivate other researchers to conduct further studies.

Recommendations:

On the basic of findings of the study the following recommendations were made.

1. A similar study can be done in various other settings.
2. A similar study can be done with large samples.
3. A comparative study can be done among adolescents in Rural and Urban schools.
4. A longitudinal study can be done to assess the influence of electronic gadget excessive use among the adolescents.
5. A study can be conducted to evaluate the effectiveness of instructional pamphlet in terms of minimizing the usage of electronic gadgets.

Limitations

The limitations of the study were as follows:

1. Since the study was conducted among the adolescents in selected schools at Madurai. Generalization must be done with caution only.

2. The response was based on verbal response of the study samples that could not be counter checked.

Summary

This chapter dealt with the summary major findings of the study, conclusions, and implications to the nursing field, limitations and recommendations for further study. This study can be a base line for future studies to be built upon.

REFERENCES

BOOKS:

- Ball, J. & Bindler, R. (2009). *Pediatric Nursing – Caring for children* (4th ed). New Delhi: Pearson education publication.
- Gail, W. Stuart. (2005). *Principles and Practice of Psychiatric Nursing*, (2nd ed.). New York: Mosby Company.
- Ghai, O.P. (2009). *Essential Pediatrics*, (7th ed), Chennai: CBS Publishers & distributors.
- Hockenberry & Wilson (2009). *Wong's Essentials of Pediatric Nursing*. (8th ed). New Delhi: Mosby Company.
- Lalitha, K. (2007). *Mental Health and Psychiatric Nursing an Indian Perspective*, Bangalore: V.M.G Book House.
- Parmelee, R., Williams, R., Beck, K. (1993). *Mental Health Psychiatric Nursing- A Holistic Life cycle Approach*, (3rd ed.). St Louis: Mosby Publication.
- Parthasarathy A. (2009). *IAP Textbook of Pediatrics*, (4th ed). Mumbai: Jaypee Brothers Medical Publication.
- Polit & Beek, (2004). *Nursing Research Principles and Methods*, (7th ed). Philadelphia: Lippincott Company.
- Rekha S.B. (2009). *Achar's Textbook of Pediatrics*, (4th ed). Chennai: Universities Press publication.
- Sundar Rao & Richard (1997). *An Introduction to Biostatistics*, (3rd ed). Philadelphia: Lippincott Company.

- Townsend, M. (2007). *Psychiatric Mental Health Nursing*, (5th ed.). Philadelphia Davis company.

JOURNALS

- Anderson,(2004).*An update on the effects of cell phone, Journal Adolecence*,27(1): pp 113 – 122.
- Beard,K.W.(2005). Internet addiction: *A review of current assessment techniques and potential assessment question. Cyber psychology behaviour*, 8(1): pp .7-14.
- Benji Stephen,(2008) *Good and bad of television* ,Herald of Health,99(11):pp 13-28.
- Block.J.(2007).*prevalence under estimated in problematic internet use study*.Cns spectrums,12, pp.14-17
- David Walsh,(2004).*TV in the bedroom, A receipe for poor academic performance*,5(2): pp 114- 125.
- Davis,F.D.(1989).*User acceptance of computer technology*.35(8):pp982-1003.
- Fisher,(1994).*Mobile phone and school performance, adolescent medicine*, 4(2): pp 607-622.
- Goffman,E.(1979).*The distraction effects of phone use*,35(2):pp.501-514.
- Hancox R.J,Milne B.J.,Poulton R.(2006) *Association of television viewing during childhood with poor educational achievement. Archive of paediatric adolescent medicine*.159, pp:614-619.
- Harrish,Gordon,Serana,(2000).*Internet Addiction and the family*, 76(3): pp 213 – 219.
- Hope,(2004).*Death by video games*.3(2): pp.211-218.

- Hunston,Jack,Milton (1998).A television for health.14:pp 6-10.
- Iman Sharif,(2006).*Factors correlated with violent video game use by adolescent boys and girls*. Journal of adolescent health,4(1): pp 77-83.
- Johnson,(2007).*Television vision syndrome a global epidemic problem*. Health Action,21(3): pp 25-30.
- Kubey,R,(1986).*Television in everyday life: Coping with unstructured time*.36(3):pp108-123.
- Merry,Madden.(2007).*Youth are leading the transition to a fully wired and mobile nation*.pew internet and American life project,34: pp 104-118.
- Patricia R.Recupera (2008).*Forensic evaluation of problematic internet use, jam academy psychiatry law*,36:pp.505-514.
- Peele,(1985).*Does it computer? The relationship between educational technology and student achievement in mathematics*,10(2):pp.76-101.
- Ray,linda E.S.(2005) *Children and computer technology*.10(2):pp78-100
- Robert wise,(2007).*Association between television, movie and video game exposure and school performance*,118: pp 1061 -1070.
- SBinger,(1996).*Mass Media and children, Paediatric clinics of india*,95(6):pp 28-30.
- Sharif,Surgent.(2006). *The dangers of my space .com for teens*. 7(3): pp138-150.
- Shotton,M.A.(1998).*Computer addiction? A study of computer tendency*. New York,9 (2):pp72-81.
- Walker,(1989).*Caught in net*,Newyork;23(5):pp.31-48.
- Young, KS.(1999).*Internet addiction:Symptoms,evauation and treatment, clinical practice*,(17):pp.141-149.

WEBSITE:

- www.flipkart.com
- www.naturalnews.com
- www.busineesweek.com
- www.internetaddiction.com
- www.listserv@netcom.com
- www.safari.net
- www.healthmad.com
- www.childrennow.org
- www.psychiatrictimes.com
- www.schoolnewsweek.com
- www.reuters.com
- www.pewinternet.org
- www.internetandvideogameaddiction.com
- www.medindia.net
- www.minddisorders.com
- www.mentalhelp.net
- www.televisionaddiction.com
- www.parenting.com

APPENDIX –I
COPY OF LETTER SEEKING PERMISSION
TO CONDUCT THE STUDY IN SELECTED SCHOOLS AT, MADURAI.

Dr. NALINI JEYAVANTH SANTHA
Principal.

4/235, COLLEGE ROAD
THASILDAR NAGAR
MADURAI – 625 020
PHONE: 2534593
Date: 01.06.2010

Ref. UT: SHNC: 2010

To
THE DIRECTOR,

Respected Sir / Madam,

Sub: Sacred Heart Nursing College, Madurai – Project work of
M. Sc (Nursing) student – permission requested – reg.

We wish to state that Mrs. S. ESTHER JENNIFER, Final year M.Sc.,
(Nursing) student of our college has to conduct a Research project, which is to be
submitted to The Tamil Nadu Dr. M.G.R. Medical University, Chennai in partial
fulfillment of University requirements.

The topic of research project is “A study to assess the influence of electronic
gadget excessive use on academic performance and family interaction among
adolescents in selected schools at Madurai.

We therefore request you to kindly permit her to do the research work in your
organization under your valuable guidance and suggestions.

Thanking you,

Yours faithfully,

Principal
SACRED HEART NURSING COLLEGE

APPENDIX –II

Letter requesting options and suggestions of experts for establishing content validity and validity of tool

From

S.Esther jennifer.,
Msc (N) II year,
Sacred Heart Nursing College,
Madurai.

To,

Respected Sir/Madam

Sub:Requesting and suggestion of experts for the content validity and validity of tool.

I am a post graduate student (psychiatric specialty) of Sacred Heart Nursing College. I have selected the below mentioned topic of the research project submitted to DR.M.G.R. Medical University, Chennai as a fulfillment of Master of Science in Nursing.

TITLE OF THE TOPIC:

“A study to assess the influence of electronic gadget excessive use on academic performance and family interaction among adolescents in selected schools at Madurai”

With regard to this may I kindly request you to content and validate my tool for its relevancy. I am enclosing the objectives of the study. I would be highly obliged and remain thankful if you could validate and send it as early as possible.

Thanking you.

Place:

Yours faithfully,

Date:

(S.Esther jennifer)

APPENDIX – III

List of Experts Consulted for the Validity of Research Tool

Dr. M. Karthikeyan, M.D., (Psy),

Assistant Professor of Psychiatry,
Madurai Medical College &
Govt. Rajaji Hospital,
Madurai.

Mrs. Jancy Racheal Daisy, M.Sc (N), Ph.D.,

Professor & HOD of Psychiatric Nursing,
CSI Jeyaraj Annapackiam College of Nursing,
Madurai.

Dr. Nalini Jeyavanth Santha, M.Sc., (N), Ph.D.,

Principal,
Sacred Heart Nursing College,
Ultra Trust,
Madurai.

Prof. Mrs. N. Chitra,

Clinical Psychologist,
Principal,
Meenakshi Mission Hospital and Research Centre,
Madurai.

Dr. Navamani Prabhakar, M.D., DCH.,

Navamani Hospital,
Madurai.

APPENDIX – IV

Tool validity certificate

I here by certify that I have validated the research tool (Demographic profile, Electronic gadget excessive use screening tool and family interaction assessment tool) of **Mrs.S.Esther Jennifer** who is undertaking a study on “ A study to assess the influence of excessive electronic gadget use on academic performance and family interaction among adolescents in selected schools at Madurai”.

Name of the Expert:

Designation of the Expert:

Name of the Institution:

Signature of the Expert

Place:

Date

APPENDIX –V

TOOL I

DEMOGRAPHIC DATA

- | | | |
|-------------------------|---|---|
| 1. Age in years | : | 13 – 15 years
16 – 18 years |
| 2. Sex | : | Male
Female |
| 3. Standard | : | 9 th
10 th
11 th
12 th |
| 4. Education of Father | : | Illiterate
Primary
High school / Higher Secondary
Diploma / Degree |
| 5. Education of Mother | : | Illiterate
Primary
High school / Higher Secondary
Diploma / Degree |
| 6. Occupation of Father | : | Coolie
Businessman
Government Employee
Private Employee |
| 7. Occupation of Mother | : | House wife
Coolie
Government employee
Private employee |
| 8. Monthly Income | : | Rs. 3000 – 5000
Rs. 5001 – 7000
Rs. 7001 – 9000
Above Rs. 9000 |

- | | | |
|-----------------------------------|---|---|
| 9. Religion | : | Hindu
Muslim
Christian
Others. |
| 10. No. of Children in the family | : | 1
2
3
Above 3 |
| 11. Order of Birth | : | 1
2
3 |
| 12. Place of Residence | : | Rural
Urban |
| 13. Type of Family | : | Nuclear Family
Joint Family
Extended Family |
| 14. Availability of Devices | : | Television
Video Games
Internet
Mobile Phone. |
| 15. Hobbies | : | Reading Books
Chatting on the Net |
| 16. Outdoor Activities | : | Cricket
Spending time with friends |
| 17. Social Gathering | : | Going to religious places
Attending Family Festivals
Attending Parties
Family Tour |

APPENDIX –VI

TOOL II

ELECTRONIC GADGET EXCESSIVE USE SCREENING TOOL

1 = Rarely 2 = Occasionally 3 = Frequently 4 = Often 5 = Always

S. No	Items	1	2	3	4	5
	Cell Phone					
1.	Do you have problems at school because of your cell phone use?					
2.	Do you have your cell phone with you constantly; at home you have it in your pocket?					
3.	Do you always feel anxious about your cell phone especially when you are unable to use it?					
4.	Do you sleep with your cell phone under your pillow or next to bed?					
5.	Do your personal cell phone use increased significantly?					
6.	Do you had problems with family and friends because of cell phone use?					
7.	Do you like to send and receive rings on your cell phone?					
8.	Do you use sms promotions?					
9.	Do you change your mobile?					
10.	Do your experience stress or insecurity when ever you are without your cell phone?					

	Television					
11.	Do you prefer to watch the television as soon as you go home?					
12.	Do you ever feel a strong impulse to turn the television on?					
13.	Do you feel that television keeps you company?					
14.	Do you watch television even when you are performing mentally demanding activities (calculations, reading, writing)					
15.	Do you bothered by other people's comments and opinions when you are watching your favorite programme?					
16.	Do you believe that life without TV would be incomplete?					
17.	Do you imitate the characters that is seen on TV?					
18.	Do you spend the study time in watching TV?					
19.	Do you think that TV may be dangerous?					
20.	Do you believe that everything we see on TV is real?					
	Video Games:					
21.	Did you ever lose time from school due to gaming?					
22.	Did you ever borrow money for gaming?					

23.	Do you prefer to play videogames first and to proceed with your homework?					
24.	Do you become irritable when you are not able to access your favorite video games?					
25.	Do you have difficulty in giving up video games for one week?					
26.	Do you suffer from headache while playing video games?					
27.	Do you plan your time before playing video games?					
28.	Do you ever had committed or considered an illegal act like stealing to paly video games?					
29.	Does gaming ever made your home unhappy?					
30.	Did gaming cause you to have difficulty in sleeping?					
	Internet?					
31.	Does your recreational activities reduced because of the time you spent online?					
32.	How often do you neglect your home work to spend more time online?					
33.	How often do you check your email? Before something else that you need to do?					
34.	How often do you lose sleep due to late night logins?					

35.	How often did you get complain from your parents about the amount of time you spend on line?					
36.	How often do you form new relationships with fellow on line users?					
37.	Does your grades or school work suffer be cause of the amount of time you spend on line?					
38.	Do you fear that life without internet would be boaring empty and joyless?					
39.	Do you use internet as a way of escaping from doing your school work?					
40.	Do your become angry when your parents place time limits?					

TOOL III

5 Point Likert Scale to assess family interaction:

1 = Rarely 2 = Occasionally 3 = Frequently 4 = Often 5 = Always

S. No	Items	1	2	3	4	5
1	Do you spend adequate time with your parents?					
2	Do you have your meals with your parents?					
3	Do your parents compare you with another child?					
4	Do you go out as a family?					
5	Does your parent help you in doing the home work?					
6	Do your parents beat you when you do something wrong?					
7	Do your parents set limits for you?					
8	Do your parents consider your opinion in making decision?					
9	Do you discuss your problems or day to day events with your parents?					
10	Do you play with your father?					
11	Do your parents motivate you to take up responsibility?					
12	Do you discuss your interests with parents?					

13	Do your parents criticize you?					
14	Do your parents pay compliments and say nice things to you?					
15	When you commit mistake will your parents explain your mistakes?					
16	Do your parents fight in front of you?					
17	Do you talk with your parents about your feelings?					
18	Do your parents allow you to do anything you want?					
19	Do your parents give freedom in selecting your garments?					
20	Do you believe that you can tell your mother whatever you think?					

APPENDIX –VII

EFFECTS OF ELECTRONIC GADGET EXCESSIVE USE

INTRODUCTION

Today's teens live in a world enveloped by electronic gadgets like internet, videogames, television, cell phone etc. Not only has the number of users increased, but also it leads to various kinds of negative impact on adolescents. It is the responsibility of the parents, health care practitioners, schools and the government to protect the adolescents from the harmful effect of newer electronic gadgets.

1.VIDEOGAMES:

Most adolescents like to spend at least part of their free time playing video games. But for some what starts out as innocent recreation can become an excessive use. Gamers spend so much time on playing, that their personal relationships get neglected and loses sleep. Video games affect adolescents by displacing time they spend doing home work.

Symptoms of Video game Excessive Use:

- Most non-school hours are spent on the computer or videogames.
- Falling asleep in School.
- Worsening grades.
- Lying about computer or videogame use.
- Choosing to use the Computer or play videogames, rather than seeing friends.
- Dropping out of other social groups (Clubs or sports)
- Being irritable when not playing a video game or being on the computer.

Physical symptoms

- Carpal tunnel syndrome.
- Sleep disturbances.
- Back aches or neck aches.
- Headaches.
- Dry eyes.
- Failure to eat regularly or regularly or neglecting personal hygiene.



Effects of video game Excessive use on adolescents.

Suffering Relationship:-

Relationships with friends and family members may suffer if you are spending more time gaming than you are talking to or going out with loved ones.

Poor academic Performance:-

Long hours of playing video games will affect your performance in school or failing to work at your optimum level. Completing homework, studying for test, and efforts during school will become very low.

Pre Occupation:-

A Video game excessive use can be harmful if you're unable or unwilling to participate in any interests or extracurricular activities other than gaming.

Health problems:-

The Adolescent who spend more than two hours a day in front of a videogames in lieu of participating in physical activity may suffer from childhood obesity.

Increased Aggression:-

Videogames that features violent actions and sceneries may lead addicted players to be desensitized.

Financial consequences:-

Teens spend large amounts of money on new games, expansion packs, service fees and computer upgrades.

Emotional/Psychological Consequences:-

Those who use excessively computer games may experience depressed mood, low self esteem, social anxiety, low frustration, tolerance, anger and feeling of guilt and shame for not being able to control their gaming habits.

**Guidelines for parents to reduce the effects of video games excessive use on adolescents.**

- Children should be helped to choose video games for them.
- It is always good to check the rating and content of the games before buying or renting.
- Parents must know the preference of the children in relation to game playing.
- They can talk to other parents for Advice and suggestions of good games.

- Parent can choose the games that are challenging and exciting without being violent.
- They should find games that require strategy and problem solving skills. If they have an educational component, that's Bonus.
- When choosing games for girls, it is desirable to look for ones that have, not – stereotypical female character.
- Video games are expensive. So before it is bought, it is the responsibility of the parents to make sure that the game has good play value.
- Always the parents must sit down and play when a new game is purchased.
- It is advisable to have the computer or video game consoles in a public area of the house so that everyone can observe what one is playing.
- Parents should explain to children why certain game is Objectionable. Inform them the effect of playing violent video games.
- They must establish the rule for the duration and the frequency of playing videogames & strictly adhere to it.
- The child must be encouraged to involve in other interesting activities.

TELEVISION

In today's world an exponential advancement has taken place in the electronic Media. Television's one of the important media for any group specially adolescents. Television has a very heavy impact on youth. It has both pros and cons, but it depends on the person what they take and what they discard in their life.

Symptoms of Television Excessive Use:

- Spending lot of time in front of television.
- Leave little or no time for outdoor games.
- Insomnia.
- Lack of Communication.



Effects of Television on Adolescents.

School Performance:-

Higher level of television viewing correlate with decrease in class room engagement, lowered academic performance, especially reading scores.

Parent Child Conflict:-

Children see the various kinds of advertisements on television and they pester their parents to buy the same for them. When such demands are not met it results in parent child conflict.

Violence:-

Increased aggressive behaviour after viewing violent TV Shows or Movies.

Diet:-

Being glued to the television screen takes away one's time away from play exercise and activities.

Emotional Effects:-

Adolescents are emotionally vulnerable. It makes them to feel like "Loser".

Cognitive Development:-

Excessive television watching diminishes the cognitive development.

Poor Eye Sight:-

Artificial light or radiation being emitted from the television screens can lead to poor eyesight problems in children and adolescents.

- Difficulties in language acquisition.
- Thinking and creative instincts are blocked.
- Continuous fatigue and headaches.

**Suggestions for parents to reduce the effects of viewing television:-**

- Not to watch television before completing homework.
- Set time limit.
- Decide the type of programme want to watch.

Participate:-

- Do not give children a television in the Bedroom.
- Accompany the children when watching TV. Discuss the programme. Ask them questions and express your views. If there is anything not good directly tell them. So it does not happen something fatal.

Monitor:-

- Avoid shows, movies or videogames that have violent or sexual content.
- Encourage children to watch programmes which provoke compassion and cooperation.
- If your child becomes quite upset after a program, allow him to talk about what he saw, what he is feeling and why.

Be a good role Model:-

- Set a good example with your own television viewing habits.
- Avoid watching programmes containing adult content when your child is in the room/nearby.

Other guidelines for parents:

- ❖ TV is not a family member - Meal time should be family time.
- ❖ Work while you work, watch while you watch -> Often parents watch TV during study time.
- ❖ Limit your viewing.
- ❖ Provide alternatives – stock plenty of non screen entertainment.
- ❖ Get organized –select programmes your family can watch together.
- ❖ Watch TV together
- ❖ A privilege to be earned- establish and enforce family viewing rules such as TV is allowed only after homework is done.
- ❖ Lock that channel- often children view their favorite channels.

INTERNET

Today's teens live in a world enveloped by communications technologies. The internet have become a central Force that Fuels the rhythm of daily life. The internet is where we spend more and more of our time. But for a growing number of people it's an out of control habit instead of a necessary part of life. Parents may feel outsmarted by their children's computer and internet abilities. The dangers inherent in this relatively uncontrolled "wired". These dangers must be unmasked and a wise parent will learn how to protect their adolescents.



Signs of Internet Excessive Use.

- Spending large amounts of time on line, especially at Night.
- Pornography on your computer.
- Receives phone calls from men you don't know or is making calls, sometimes long distances, you don't recognize.
- Receives mail, gifts.
- Adolescents turn the computer monitor off quickly. Changes the screen on the Monitor when you come into the room.
- Your child becomes withdrawn from the family.
- Using online Account Belonging to someone else.

Effects of internet excessive use on Adolescents:-

Isolation:-

The internet can isolate from your family and friends Because of your online relationships.

Guilt:-

As you sit down to your computer each day, you may try to hide your internet use from your family because you feel so guilty.

Poor Diet:-

Those who were addicted to the internet had a poorer diet; including skipping meals, frequent snacking of unhealthy food choices.

Withdrawal:-

You may feel withdrawal symptoms when you aren't able to use the computer, including feeling agitated quite to anger to desperation.

Suggestions for parents to reduce effect of Internet excessive use:-

1. Continue to keep family communication as open & Positive about computers as you can.
2. Create a list of internet house rules as a family includes the kinds of sites, internet hours, what information should not be shared online.
3. Keep internet connected computers in an open area and not in a teen's bedroom.
4. Insist that they never agree to meet an online friend.
5. Teach your teens responsible, ethical online behavior. They should not be using the internet to spread gossip, bully or threaten other.
6. Discuss online gambling and its potential risks with your teens.
7. Always maintain access to your child's on line account and randomly check his/her email.
8. Keep busy find activities to keep your teen's mind of the internet.
9. Encourage your teen to tell you if something or someone online makes them feel uncomfortable or threatened. Praise their Behavior and encourage them to come to you again if something happens.

10. Seek help- consult a physician if self help tactics or the intervention of family or friends haven't successfully curbed your internet use.



Cell Phone

Nowadays, cell phones are very popular. Nearly each of us have it. We like talking on cell phones, sending SMS, playing games etc. Relationships are built through phones..key boards and keypads are becoming the keys to our teens heart. Cell phones create a distraction from real life experiences and because of their ability to be taken anywhere. But is that a good way to communicate?



Signs of Mobile Excessive use:-

- Often hanging with the Mobile phone.
- Not allowing others to touch their mobile.
- Late night conversation.
- Getting others Mobile and Manipulating.
- Stealing the money.
- Always keeping the Mobile in silent mo

Effectsofmobile excessive use on adolescents:-

- ❖ Some people (especially teens) get addicted and waste large part of their time.
- ❖ Distraction in the class room.
- ❖ Cheating during examination.
- ❖ Health of those living in the vicinity of cell phone tower is becoming a growing concern.
- ❖ Cell phone monthly bill Increases
- ❖ It affects the sensitivity of the ears
- ❖ Cell phone blast due to excessive heating of battery
- ❖ Mobile phone radiation affects the electrical activity of the brain
- ❖ Increasing cause of accidents-because it deviates the attention of the driver
- ❖ Big nuisance in calm and silent places like libraries.
- ❖ The mobile phone advertisements through calls are becoming pain of the users.
- ❖ Electronic parts of a cell phone can be environmental hazard if not properly disposed.
- ❖ If affects the relationship (less interesting face – to - face interactions)
- ❖ Decreased Male Fertility:-

Men who use cell phone for more than four hours per day had markedly poorer sperm quality.

❖ **Increased Cancer risk:-**

Using cell phone results in increase risk of Brain cancer, Because it is the organ in close proximity to gadget.

Adolescents are more susceptible to play potential dangers because their nervous systems are still in development. If central nervous system could be affected there by having impact on Learning or behaviour. Radiations from cell phone only travel about 2 inches into the Brain of an adult, but it goes beyond the center of a children Brain.

Parental guidelines:

➤ **Start simple:**

Tell how to use the phone, pointing out valuable features like the key lock, vibrate, etc.,

➤ **Limit usage:**

Designate time slots

➤ **Teaching responsibility:**

Make sure your teen understands cell phone is not a

➤ **Keep it private:**

Instruct them to use caution when giving out his / her number

➤ **Assess before answering:**

Teach him not to answer calls or text message from numbers he doesn't recognize.

➤ **Exercise etiquette:**

Enforcing your own rules.

➤ **Protect your property**

Teach him to be discreet and keep the phone locked away when not in use.

➤ **Utilize the landline**

Recommend your child to use landline for necessary phone calls.

➤ **Beware of download overload**



FAMILY INTERACTION

Introduction

Good parent-Children relationship matters in the later success of children. Creating a meaningful close relationship with your adolescents begins from the moment they are born. You can't turn back the clock and if you are having a difficult time with your teen. It is still possible to build a closer relationship.

Signs of poor family interaction:



- Parents not spending adequate time with their teens.
- Not helping in their studies.
- Lack of family meal time.
- No hang out with children.
- Lack of love.
- Not playing with their children.
- Lack of communication.



Negative effects of family interaction:

- Teens spending more time on internet.
- Hanging with their mobile phone.
- Not respecting the parents.
- Getting addicted to drugs and alcohol.
- Poor academic performance.
- Bad company.
- Low self esteem.

Tips to strengthen family interaction:

- ❖ Say I love you:-

Tell your teen you love him/her every day. A simple “I love you” goes a long way toward developing and then strengthening a relationship.

- ❖ Teach your faith.

Teach your teen about your faith and beliefs. Allow time for your teen to ask questions and answer them honestly.

- ❖ Establish a special name.

The special name can be established to have special meaning between your child and you.

❖ Let your teen help you.

Parents some times in advertently miss out on opportunities to forge closer relationships by not allowing the child to help them with various tasks and chores.

❖ Play with your children.

Play whatever is Fun and interesting. It doesn't matter what you play. Just enjoy each other.

❖ Eat meals as a family.

Eating together sets the stage for conversation and sharing. Turn the TV off and don't rush through a meal.

❖ Seek out one –on –one opportunity often.

Some parents have special nights with their children whether it is a walk around the neighborhood or just a movie night. It is important to celebrate each child individually.

❖ Respect their choices.

Children reach out independence at a young age and parents can help to foster those decision making skills by being supportive.

❖ Make them a priority in your life.

Your children need to know that you believe they are a priority in your life.

❖ Be a role model.



Conclusion

Electronic gadgets have both positive and negative effects but negative impact of electronic gadgets outweighs the positive impact. as parents are the first teachers to their children they must assess the impact of electronic gadgets on academic performance and family interaction and encourage their positive attitude and reduce negative effects.